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ABSTRACT

This report presents the results of a New Jersey school district field test of a comprehensive administrator training program. The program's main objectives were to develop a knowledge-utilization approach to the improvement of instruction and student achievement in basic skills, and to develop and test strategies for installing and disseminating the approach. Findings indicate that successful implementation varied somewhat according to the commitment and understanding of key concepts of both principals and teachers. Of the eight elementary schools and one middle school participating in the field test, two schools ranked relatively high, four medium, and three low in overall levels of implementation. The moderate level of program implementation districtwide seemed to have positive results for students. Results indicated a reversal of previous trends, with students attaining around the national average in reading and exceeding the national average in mathematics. Achievement gains showed a direct correspondence to levels of program implementation. Extensive appendixes include results of related analyses in Pennsylvania and Delaware, copies of data collection forms/instruments, summary indexes of program implementation levels, New Jersey district/principal self-assessment results, and implementation checklists for districts and principals. (JBM)

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DOCUMENTATION REPORT: PHASE II
A FIELD TEST OF ACHIEVEMENT DIRECTED LEADERSHIP

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CHAPTER ONE

INTRODUCTION

The institutional mission of Research for Better Schools, Inc. (RBS) as an educational R&D laboratory is to help elementary and secondary schools in Delaware, New Jersey, and Pennsylvania improve their educational programs (RBS, 1979). To accomplish this, RBS has cooperated with educational agencies at all levels in the tri-state area in developing and disseminating models for school improvement within the context of statewide school improvement efforts.

The Basic Skills Component (BSC) of RBS has adopted the mission of helping schools in Delaware, New Jersey, and Pennsylvania to improve their basic skills programs. Pursuant to this mission and with the support of the National Institute of Education (NIE), the BSC launched a basic skills improvement project in 1977. The project has two main objectives: (1) to develop a knowledge-utilization approach to the improvement of instruction and, ultimately, student achievement in the basic skills; and (2) to develop and test strategies for installing and disseminating the approach. Over the course of the project, many educational agencies have cooperated with the Basic Skills Component. The advice and assistance contributed by these partners have been critically important to the accomplishment of the project's objectives.

The result of the project's cooperative development work is Achievement Directed Leadership, a staff development program aimed at helping teachers, principals, and district administrators use knowledge and research findings to improve basic skills instruction, and, ultimately, student achievement. This document reports on the field test of

Achievement Directed Leadership undertaken by the BSC in response to recommendations of an NIE site review team and the NIE project officer, Dr. Barbara Lieb-Brilhart. The overall purpose of the field test was to assess the effectiveness of Achievement Directed Leadership. The field test hypothesis was that Achievement Directed Leadership has a direct and significant effect on instructional leadership and classroom processes/conditions, and consequently, on students' basic skills achievement. To test this hypothesis, the program was fully implemented in a school district in the tri-state area served by RBS, and a large body of data was collected both on program implementation and outcomes in this district.

The second chapter gives a brief overview of Achievement Directed Leadership. The third chapter details the evaluation methods and limitations of the field test. The fourth chapter discusses implementation and outcomes of Achievement Directed Leadership in the field test district.

CHAPTER TWO

ACHIEVEMENT DIRECTED LEADERSHIP

Achievement Directed Leadership is a program aimed at helping teachers, principals, and central office staff use research knowledge to improve basic skills instruction, and, ultimately, student achievement in elementary schools. It has four main elements: (1) a focus on a set of classroom variables that seems to be especially important to basic skills achievement; (2) a variables management strategy, or "improvement cycle"; (3) a method of coordinating and focusing improvement efforts across the levels of the district hierarchy, called the "leadership plan"; and (4) a staff development program which provides the training necessary for installation and maintenance of the leadership plan. The next four sections of this chapter describe each of these elements of Achievement Directed Leadership.

The Classroom Variables

Recent research findings pinpoint many variables in elementary school classrooms which are significantly related to student achievement (e.g., Brophy & Good, 1974; Dunkin & Biddle, 1974; Medley, 1977; Rosenshine & Furst, 1973). These findings indicate that students who have or acquire prior learning that helps them to learn new content and who spend an adequate amount of engaged time successfully covering, mastering, and reviewing content on which they will be tested are likely to perform better on year-end achievement tests than students who do not act this way.

All educators in a district, especially teachers, are urged to give special attention to the following student behaviors or focus variables:

- Prior learning, knowledge possessed by students which will facilitate their learning of new subject matter (Bloom, 1976; Carroll, 1963)
- Student engaged time, amount of time students actually spend on assigned learning tasks (Anderson, 1981; Carroll, 1963; Fisher, Marliave, & Filby, 1979; Rosenshine, 1979; Stallings & Kaskowitz, 1974)
- Academic performance, success students experience with daily learning tasks, their mastery of curriculum units, and their review of content achievements (Block & Burns, 1976; Bloom, 1976; Crawford, 1978; Fisher, Marliave, & Filby, 1979)
- Coverage of criterion-relevant content, opportunity students have to learn the content on which they will be tested (Cooley & Leinhardt, 1980; English, 1980).

Exclusive attention by educators to one or another of the focus variables without due attention to all will not be fully beneficial. Furthermore, these four variables are, in turn, influenced by myriad other variables. How the four focus and other variables are addressed by Achievement Directed Leadership is described in the discussion of the improvement cycle that follows.

The Improvement Cycle

No matter how valid the research, knowledge of significant classroom variables is often not sufficient for the improvement of instructional practices. In order to effect change, a practical method of applying this research to particular classroom settings must be included in the knowledge resource. The variables management process, or improvement cycle, is such a method, and in Achievement Directed Leadership it is applied to each of the focus variables.

The improvement cycle is a four-phase iterative process by which educators can identify and take advantage of opportunities to improve classroom instruction, variable by variable. Phases one and two of the improvement cycle are concerned with student classroom behaviors, while phases three and four deal primarily with teacher behaviors. The cycle is depicted graphically in Figure 1.

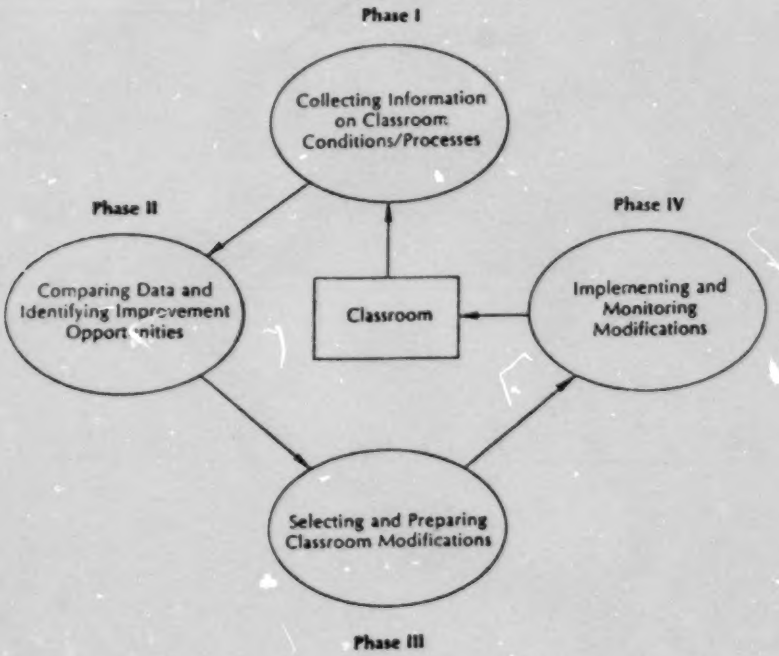

Figure 1. Improvement cycle used to manage classroom variables related to students' achievement in reading/language arts or mathematics.

The following description illustrates how the improvement cycle is applied to one of the focus variables, student engaged time. A teacher, working with the principal or another educator, attempts to assure that student engaged time is at a level conducive to high student achievement.

In phase one the principal or assisting teacher collects data on engaged time in the teacher's classroom in a manner similar to the way data were collected in relevant research studies. By comparing these data with data from classrooms in research studies, the teacher and principal, or other assisting educator, determine in phase two whether an improvement opportunity exists.

If they find that the level of student engaged time is already at an ideal level, they would not complete the remaining phases of the cycle, but instead would go back to phase one, scheduling dates for subsequent data collection. If improvement is possible, they decide in phase three upon a strategy to effect the necessary change. In the third phase the involved instructional leaders take into account many other classroom variables that may affect student achievement indirectly through their impact on the targeted focus variable. After preparing to implement the classroom modification, the teacher proceeds to implement and monitor the change in phase four.

Instructional leaders are able to assess the effectiveness of the classroom modification by repeating phases one and two, wherein they collect and analyze new data after an appropriate interval of time has elapsed. For example, if the strategy has had little or no effect on students' engaged time, they would proceed to phases three and four again, adjusting the classroom modification or introducing a new modification as circumstances dictate.

The Leadership Plan

The leadership plan is a means by which central office and school staff can coordinate and focus their efforts to establish and maintain instructionally effective classrooms. This plan, derived from selected studies on effective classrooms, schools, and districts, specifies several role-related functions for educators at each level of the school district, and makes explicit channels of communication between levels. Each level performs its functions using the improvement cycle and focuses on the goal of improving, or maintaining, the classroom focus variables. The following three sections discuss how the leadership plan operates at the classroom, school, and district levels.

Classroom

The leadership plan emphasizes the importance of the following teacher functions: planning classroom activities and procedures, managing the classroom, and delivering instruction. Since research indicates that students' achievement is vitally related to their classroom behaviors (i.e., the focus variables), the leadership plan calls for teachers to give these behaviors special attention by performing their role-related functions according to information supplied through the improvement cycle.

Figure 2 is a graphic representation of the leadership plan for the classroom level. As shown, students' classroom behaviors are significantly influenced by their entering behaviors, especially those which reflect their prior academic learning. According to the leadership plan, teachers take these entering behaviors into consideration as they plan instruction for students. This is represented in Figure 2 by the solid

arrow connecting students' entering behaviors with the teacher. Furthermore, the teacher uses the improvement cycle to attend to all other classroom variables as they plan, manage the classroom, and give instruction. The arrow connecting teacher and classroom is double headed, however, to indicate that each influences the other. Finally, students' year-end achievement is directly related to their classroom behaviors. Figure 2 recognizes this, while also taking into account the relationship between students' entering behaviors and their year-end achievement.

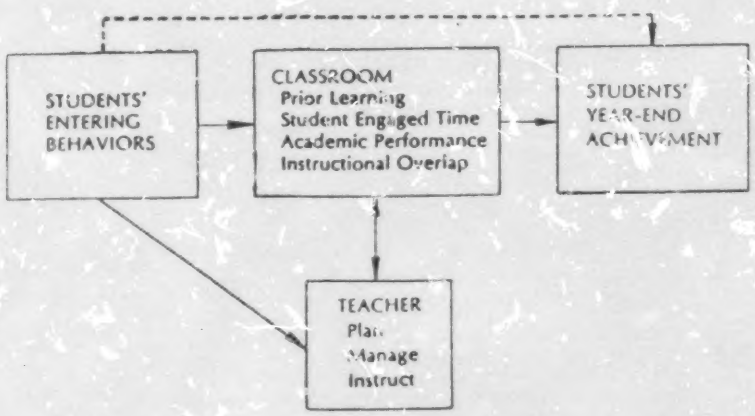

Figure 2. The leadership plan: the classroom level.

Teaching in the classroom is a complex process, and it occurs in the context of larger and even more complex settings, the school and district, which frequently influence the conditions and processes of the classroom. The leadership plan calls for teachers to regularly cooperate with the principal and other teachers in planning for and implementing improvements at the school and district levels as well as in their respective classrooms.

School

Although research has not yet made clear the relationship between principals' leadership and classroom instruction (Koehler, 1981), some research, and the experience of the BSC and its project partners, suggests that several kinds of principal support are needed to maintain at the classroom level the type of instructional leadership described in the previous section. This support derives from principals' performance of the following functions: planning for and with teachers, training teachers, and providing participatory supervision to teachers.

These principal functions are intended to facilitate teachers' use of the improvement cycle and foster teacher growth. Figure 3 represents the use of the leadership plan for the school, and shows the relationship of the principal to the teacher and classroom. The arrow from classroom to principal indicates that the principal is continually informed of classroom conditions and processes through regular classroom visits, teacher reports, and participatory supervision activities with the teacher in the use of the improvement cycle. The double-headed arrow connecting principal and teacher represents a two-way flow of information. This exchange of information occurs in regular principal/teacher conferences. The leadership plan calls for these conferences to be held frequently, and to include review of the classroom data on each focus variable.

District

Something is known of the characteristics of effective districts and of the critical elements that contribute to a district's success in implementing planned change (e.g., Berman & McLaughlin, 1975; Pincus &

Williams, 1979). However, research and documented knowledge have little specific to say about how these factors affect instructional leadership in schools and classrooms. It is the experience of the BSC and its partners that several kinds of central office support can help to establish and sustain the kind of instructional leadership described above at the school and classroom levels.

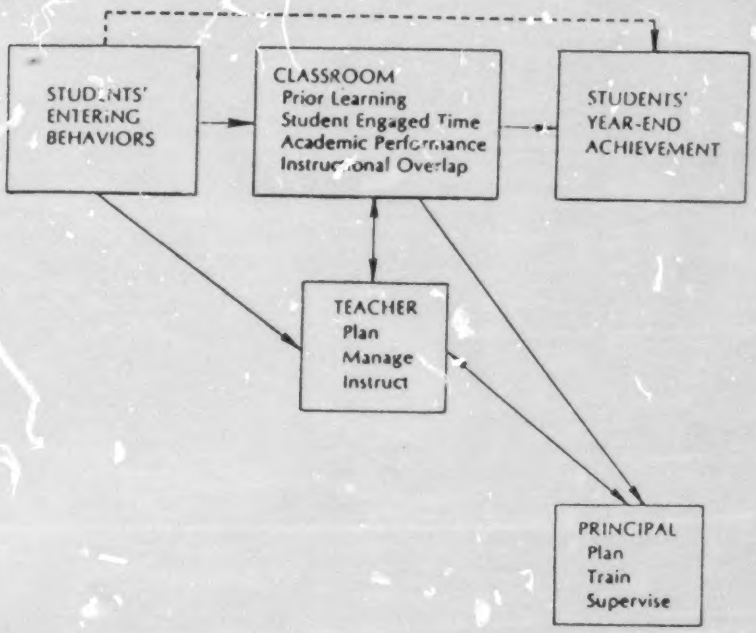

Figure 3. The leadership plan: the school level.

The functions of central office staff are similar to those of principals, and are equally concerned with the classroom dimensions which affect student achievement. These functions, however, are primarily directed to the support of principals. The central office functions are: planning

with principals, training principals to perform their role-related functions, and providing participatory supervision to principals. These central office functions are intended to facilitate efforts of principals to promote and support growth of teachers as instructional leaders.

Figure 4 depicts the relationship of district leadership to the principal, teacher, and classroom. The solid double-headed arrow between principal and district indicates a two-way flow of information. Although much of the communication will be informal, the principal and district leadership should also have formal conferences in which they review the documented outcomes of the principal's conferences with teachers.

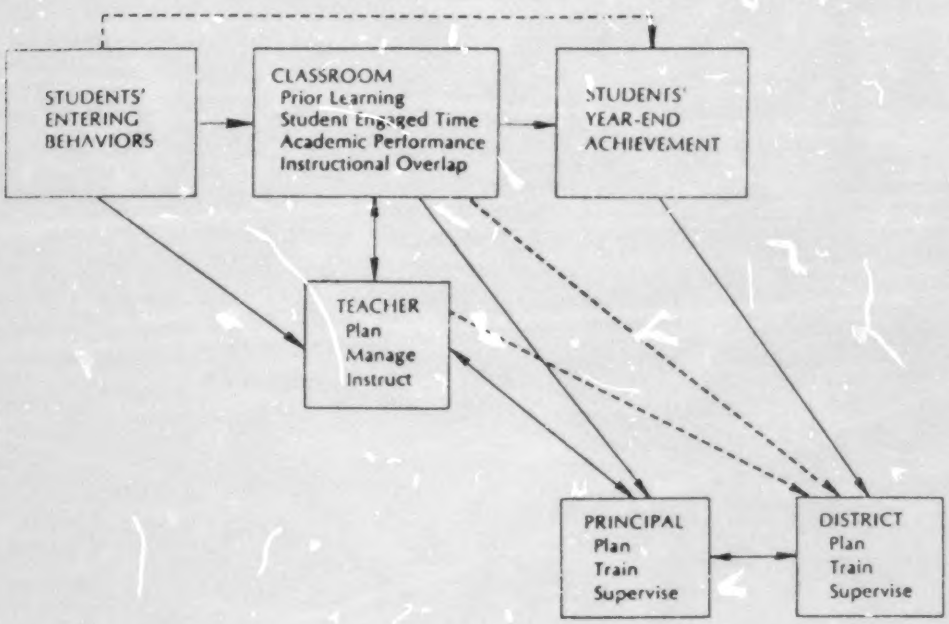

Figure 4. The leadership plan: the district level.

District leadership and the principal give explicit attention during their own conferences to the status of classrooms with respect to the focus variables and to the teachers' plans for and success in improving instruction. During the conferences and throughout the year, the instructional leadership plan calls for the district leadership to be continually alert to opportunities to assist principals with the conduct of their own leadership responsibilities and functions.

The arrow from students' year-end achievement to the district indicates the importance of these assessment data to central office staff. For example, during district/principal conferences, district leadership evaluates the classroom information compiled by the principal in terms of students' past achievement and district goals for their achievement in the current year.

Although the district relies primarily on the principals for information concerning schools and classrooms, district leadership may also acquire information directly through personal visits and reports. The arrows in Figure 4 from classroom and teacher to district leadership acknowledge this, and are broken to indicate that central office staff's visits to classrooms and with teachers are necessarily much less frequent than those of principals.

Staff Development

In order to implement Achievement Directed Leadership, educators need to (1) be informed of the program; (2) understand and develop skills in the use of instruments and procedures associated with the improvement cycle; and (3) plan for implementation and maintenance of the program in

their own organizations. In short, they require a program of specialized staff development. The fourth main element of Achievement Directed Leadership is such a program.

The staff development program is not canned, and cannot be effectively implemented by instructional leaders who use the program materials simply as recipes. Initial training and support should be acquired from an external agency. However, school districts should not depend continually upon outside assistance. The major thrust of the staff development program is to assist school districts and schools to acquire their own capability to sustain Achievement Directed Leadership in their organizations, and, if they choose, to lend initial implementation assistance to other school districts and schools.

The orientation to Achievement Directed Leadership is short and should be given by a knowledgeable session leader. The purpose of this orientation experience is to inform prospective users about Achievement Directed Leadership and the staff development program. The decision to adopt [illegible] part, of the program may require additional information and discussions.

There are two kinds of training which help educators develop understanding and skills in the use of Achievement Directed Leadership. One kind trains instructional leaders in the management of classroom variables and is divided into two separate packages, one relating to content variables and the other to time variables. The other provides instructional leaders with training specifically related to their roles and functions in the leadership plan.

Training in the management of the content variables focuses on the importance of prior learning and coverage of criterion-relevant content and describes the activities of the improvement cycle associated with each variable. Workshop experiences prepare district staff and principals to assist teachers in the preparation and use of integrated instructional plans that attend to these two variables. These plans also provide a means for instructional leaders, including teachers, to monitor content coverage and mastery of content during the course of the year.

Training also prepares all instructional leaders to be competent managers of student engaged time. Portions of the training are presented on videotape. Precoded videotapes of actual classrooms provide practice in classroom observation. On completion of training, trainees can collect data on student engaged time, compare their data with data from similar classrooms reported in research studies, select research-based classroom strategies to exploit identified opportunities for improving student engaged time, and implement and monitor the classroom modifications.

Although current training does not treat students' academic performance as a focus variable, the approach recognizes the critical importance of this variable. In the third phase of the instructional improvement cycle, special attention is given to the success of students with daily work, to their mastery of curriculum units, and to their maintenance of previous achievements.

It is recommended that Achievement Directed Leadership be implemented district-wide, and to this end, separate versions of instructional leadership training are provided for educators at each level of the district. Training makes clear the roles of the respective levels in the leadership

plan. It also details the functions of each level, provides background information relative to each function, and suggests ways leaders can facilitate performance of these functions. In short, this training is designed to aid all instructional leaders to coordinate and focus their efforts to establish, support, and sustain effective classroom instruction within effective schools and districts.

Training in the leadership plan is not a brief intensive experience as is the initial training for management of the classroom variables. Rather, leadership plan training is an on-the-job, continuing experience in the solving of real problems associated with the implementation and institutionalization of Achievement Directed Leadership.

Since problems associated with implementation and institutionalization are often shared across levels of the school district, the leadership training is designed to assist the school district with the planning and conduct of leadership seminars or conferences that address these problems on a cross-level basis. Although the assistance of an external consultant may be required to plan and conduct early leadership seminars, these experiences are intended to prepare leaders to assume early management of their own planning and problem-solving sessions.

CHAPTER THREE

FIELD TEST EVALUATION PROCEDURES

This chapter describes the procedures used in conducting the field test of the basic skills instructional improvement approach during the 1981-1982 school year. Separate sections describe the general context for the test, present the conceptual framework for the study, indicate the data collection procedures that were employed, note data analysis plans, and discuss study limitations.

Context for the Field Test

During the late spring and summer of 1981, districts which might serve as sites for the field test were investigated. One main site was selected as the focus of the field test.[1] This site, referred to as the New Jersey School District, agreed to mount a reasonably full implementation of Achievement Directed Leadership during the 1981-82 school year.

The New Jersey School District had cooperated with RBS in the development of the BSC approach for three years prior to the field test year. Developmental efforts were undertaken with a few volunteer teachers

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[1] During the 1981-82 school year, the BSC also worked with and collected information from two other school districts (one in Pennsylvania and one in Delaware) in regard to implementation of Achievement Directed Leadership. Each of these two districts represented an opportunity to test supplementary questions about the effectiveness of Achievement Directed Leadership. A report on each district's utilization of the program is found in the appendices (Appendix A for the Pennsylvania District and Appendix B for the Delaware district).

in each of four elementary schools. The field test represented expansion and full implementation of the Achievement Directed Leadership program in the district's eight elementary schools and one middle school. Implementation plans indicated that the district would endeavor to reasonably replicate all elements of the Achievement Directed Leadership program.

Field Test Framework

Table 1 presents the overall framework that was used to guide the field test. The framework contains five levels: (1) the BSC; (2) central office staff/district (e.g., superintendents, assistant superintendents, curriculum supervisors/coordinators); (3) principal/school; (4) teacher/classroom; and (5) student/classroom. At each level, the functions listed in the table refer to the prescribed activities for that level that are deemed essential for implementing the approach. At the BSC level the primary functions are planning and conducting initial orientation of district staff to the improvement approach, planning and delivering training to district staff in the use of the approach, and providing follow-up technical assistance to ensure and upgrade the quality of implementation. Essentially, these three functions are concerned with the process of initially installing and maintaining the improvement approach in the field test sites. Ideally, implementation of Achievement Directed Leadership helps school districts to develop the capacity to establish and sustain the instructional improvement approach. Appropriate central office staff should acquire a strong commitment to the program, as well as the knowledge and skills needed to implement it. Therefore, an important objective

Table 1
Field Test Framework

Level	Functions	Field Test Objectives	Field Test Methods
BSC	• Plan and conduct district orientation to the improvement approach • Plan and deliver initial training to district staff in the use of the approach • Provide follow-up technical assistance to district to facilitate implementation of the approach	• Document the process of initially installing the improvement approach • Document the outcomes of installing the improvement approach in terms of acquired knowledge, skills and attitudes	• Observe orientation and training sessions • Observe Implementation Seminars • Interview participants (i.e., district leadership and supervisors) • Survey participants' reactions to orientation/training
District	• Plan and conduct principals' orientation to the improvement approach • Plan and conduct training of principals in use of the approach (i.e., their role-related functions) • Engage in participatory-supervision with principals	• Document the process and outcomes of staff development for principals • Document the process and outcomes of participatory-supervision	• Observe orientation and training sessions • Interview district staff and principals about district/principal supervisory conferences • Analyze District/Principal Conference Form • Survey principals' reactions to orientation/training

Table 1 (continued)
Field Test Framework

Level	Functions	Field Test Objective	Field Test Methods
Principal	• Plan and conduct teachers' orientation to the improvement approach • Plan and conduct training of teachers in the use of the improvement cycle/focus variables • Engage in participatory-supervision with teachers	• Document the process and outcomes of staff development for teachers • Document the process and outcomes of participatory supervision o Document principals' use of the improvement cycle	• Observe orientation and training sessions • Interview principals and teachers about district/principal supervisory conferences • Analyze the Principal/Teacher Conference Form • Survey teachers' reactions to orientation/training • Validate classroom observations
Teacher	• Plan lessons and classroom activities • Manage the classroom • Deliver instruction	• Document teachers' use of the improvement cycle/focus variables to guide planning, management, and delivery of instruction	• Interview teachers about use of the improvement cycle and its impact on planning, management, and delivery of instruction • Obtain confirmatory reports from principals, district staff, and BSC field staff of teachers' use of cycle • Survey teachers' use of improvement cycle

Table 1 (continued)
Field Test Framework

Level	Functions	Field Test Objective	Field Test Methods
Student	• Demonstrate student classroom behaviors identified as critical to achievement • Demonstrate appropriate levels of achievement in basic skills subjects	• Document impacts of the improvement approach on critical student behaviors • Document impacts of the improvement approach on students' achievement in reading/language arts and mathematics	• Analyze student behaviors: student engaged time; instructional overlap; academic performance; and prior learning • Analyze students' achievement based on standardized achievement tests used in the district

of the field test was to document both the processes and outcomes of the BSC's work with the district level.

At the second and third levels within the field test framework, district leadership and principals share common functions: planning, training, and supervision. Ideally, central office staff are responsible for planning and conducting the principals' orientation and training and for providing participatory supervision to principals with respect to the principals' responsibilities. Principals, in turn, are responsible for planning, training, and supervising teachers. The field test objectives at the district level were to document the processes and outcomes of principals' staff development and central office participatory supervision of principals. At the principal level, the objectives were to document the processes and outcomes of staff development for teachers, participatory supervision of teachers by principals, and principals' use of the improvement cycle.

The primary functions at the teacher level are planning, managing the classroom, and delivering instruction. Utilized properly, the improvement cycle can aid the teacher to improve his/her performance in these functional areas. The field test objective at this level was to document teachers' use of the improvement cycle and focus variables in performing these functions.

At the fifth level of the framework, students are expected to demonstrate behaviors that promote effective learning (i.e., behaviors associated with the BSC focus variables) and to perform at appropriate levels of achievement in basic skills. At the student level the field test was primarily concerned with the assessment of expected outcomes of the approach,

namely, improved student classroom behaviors and improved achievement in basic skills subjects.

Data Collection Procedures

As indicated in the last column of Table 1, multiple data sources were used to address the field test objectives at each of the five levels. The variety of sources is indicated in Table 2. Due to resource constraints and feasibility considerations, most of the information was self-report in nature. In order to enhance the reliability of these data, attempts were made to "triangulate" wherever possible. Several types of educators (e.g., superintendent, principal, teacher) were questioned about the same topics in order to gain insight into their various perspectives. Consistency of findings from different sources adds credibility to arguments of effectiveness. Each of the data sources is briefly described below. A copy of many of the forms/instruments is included in Appendix C.

- District/School Documentation: Proposals, plans, correspondence, reports, and memos were collected from the district and reviewed.
- BSC Contact Reports: This was a formal process for documenting all BSC field work. The reports describe objectives, activities, outcomes, and future plans for each contact.
- BSC Observations and Informal Interviews: BSC observers attended some orientation and training sessions and made impressionistic notes. Other informal observations and discussions occurred throughout the course of the field test.
- Post-Training Questionnaires: Specific questionnaires tailored to each training event solicited participants' reactions to training, self-assessments of acquired knowledge and skills, and general comments.
- Post-Training Interviews: Interviews were conducted with district staff and principals to obtain in-depth information regarding the effectiveness of training and their perceptions of the Achievement Directed Leadership approach.

2/17/83

Table 2

Summary of Field Test Data Sources, by Level

Data Sources	Level of Analysis				
	BSC Level	District Level	Principal Level	Teacher Level	Student Level
District/School Documentation	0	X	X	0	0
BSC Contact Reports	X	X	X	0	0
BSC Observations and Informal Interviews	X	X	X		
Post-Training Questionnaires	X	0	X		
Post-Training Interviews	X	0			
District/Principal Conference Forms		X	0	0	0
Preliminary and Final Superintendent Interviews		X	0	0	0
Final District Staff Interviews		X	0	0	0
Final Principal Interview		0	X	0	0
Principal Questionnaire		0	X	0	0
Principal Participatory Supervision Interview			X	0	
Principal/Teacher Conference Form			X	0	
Teacher Questionnaire		0	0	X	0
Final Teacher Interview		0	0	X	0
Instructional Overlap Forms				0	X
Classroom Observation Forms				0	X
Standardized Achievement Tests					X

NOTE: X indicates primary data source

O indicates secondary data source

- District/Principal Conference Forms: This form was used by district leadership and principals to identify opportunities to develop effective strategies for instructional improvement.

- Field Interviews with Superintendent, District Staff, Principals, and Teachers: Specific interviews tailored to each group were administered at the end of the school year. These were generally designed to elicit information about roles and activities during the year, perceived success and problems, and overall reactions to the approach. The superintendent was also interviewed at the beginning of the field test.

- Principal and Teacher Questionnaires: Forms (primarily close-ended) directed to each specific group were designed to obtain information on the extent and quality of implementation and reactions to the approach. These were administered once towards the end of the school year.

- Principal Participatory Supervision Interview: Special interviews were designed to describe principals' experiences in using the improvement cycle and in conducting participatory supervision with teachers.

- Principal/Teacher Conference Form: This form was designed to help principals and teachers implement the improvement cycle and conduct participatory supervision conferences. The form summarizes information on prior learning, instructional overlap, success and mastery levels, engaged and allocated time, and engagement rate. This information was to be used to identify opportunities for improvement.

- Instructional Overlap Forms: Various forms were used to summarize the degree to which each teacher's instruction matched the content on the appropriate achievement test.

- Classroom Observation Forms: These forms were used to structure observations and to describe and calculate allocated time, engaged time, and engagement rate.

- Standardized Achievement Tests: These tests are part of the district's testing program and are administered in spring each year to all students. The New Jersey School District used the California Achievement Test (CAT). In addition, scores from the statewide basic skills competency test were available. Total reading and mathematics subscores were collected[2]; students took

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[2]Scores for special education and English as a Second Language (ESL) students were not included in the collected data.

the level of the test designated by the test publisher as appropriate for their grade.

It is clear from this wide variety of information sources that the scope of the overall field test data base is quite large.

Data Analysis Plans

The guiding principle in the data analysis was reduction of the enormous quantity of information to a simple, straightforward, and meaningful level. Since much of the data was qualitative and/or self-report, the analyses were primarily descriptive. Interviews were abstracted using a structured format, and general themes were reported in narrative fashion. Survey checklists and observation data were summarized in terms of descriptive statistics, including frequencies, means, and percentages. Quantitative data were collapsed into meaningful categories wherever possible.

General indices were constructed to summarize implementation and classroom process data. The implementation index synthesized information on principal and teacher attitudes and behaviors related to use of the key elements of the Achievement Directed Leadership program. The classroom process indices related student engaged time and instructional overlap data to existing research findings in terms of expected levels of student achievement. Both implementation and classroom process indices were developed to examine the relationship between these variables and student achievement. The procedures for deriving implementation indices are found in Appendix D. Because the validity and reliability of these

indices are subject to question, caution must be exercised in interpreting results.

The primary level for reporting implementation and achievement data was the school. Where appropriate, grade level data within a school were examined. Analysis of classroom data would have been ideal, and attempts were made to collect data at the student level. However, initial analyses indicated severe data completeness problems and lack of representativeness. Analyses at the school level can be made with reasonable confidence since there were numerous data points and sufficient sample sizes.

Analysis of achievement data was guided by the Title I norm-referenced evaluation model (model A1; see Tallmadge & Wood, 1976). This model compares students' standing relative to national norms at one point in time to their standing relative to national norms at a subsequent point in time. All things considered, position relative to the norms should not substantially change across test dates. Introduction of an appropriate educational intervention is hypothesized to account for changes in relative student achievement observed. Normal curve equivalents (NCEs) were used as the basis for analysis. These are standardized scores with a mean of 50 and a standard deviation of 21.06. Scores were collected for each participating field test school at each grade within a school for 1980, 1981, and 1982. A "diagonal" analysis of results was conducted, i.e., results of students in grade three in 1982 were compared with results of students in grade two in 1981 and grade one in 1980. The comparison from year to year is, therefore, essentially for the same groups of students. Scores do not exist, of course, for field test second graders before 1981, or for first graders before 1982. Therefore, school means spanning the

three years (1980, 1981, 1982) do not include scores for these two grades. Change from 1980 to 1981 was used as a baseline to compare with gains registered from 1981 to 1982.

There are no hard and fast rules for interpreting the significance of NCE gain scores. Some evaluators suggest a change of one-third of a standard deviation (i.e., seven NCE points) as a rule of thumb for educational significance, while others note that any change (i.e., one NCE point) is good (Tallmadge, & Wood, 1980; Tallmadge, 1976). Examination of the standard error of the difference between means for samples in this study suggested that a change of five NCE points from year to year could be regarded as an appropriate rule of thumb for determining the educational significance of gains.

Limitations of the Field Test

Due to the developmental nature of the Achievement Directed Leadership program, as well as feasibility and resource constraints, no appropriate control or comparison groups were available for the field test. Thus, the evaluation was not rigorous in an experimental sense. The design can be categorized as nonexperimental rather than true or quasi-experimental (Campbell & Stanley, 1966). A nonexperimental evaluation design does not imply, however, that the test was performed in a haphazard way or that it did not provide indicators of the success or failure of the BSC approach. On the contrary, a wealth of consistent information was gathered that, collectively, lends credence to beliefs about hypothesized program effects. Although indicators of descriptive or correlational relationships are not as credible as indicators of experimental, causal

relationships, they, nevertheless, provide support for arguments concerning program effectiveness.

Limitations to the field test evaluation fall into four major categories: (1) timing issues, (2) design issues, (3) analytic issues, and (4) data issues. Any interpretation of field test results must recognize the implications of the issues. Each of the issues is discussed below in more detail.

Time issues

The Achievement Directed Leadership program is a large scale and fairly complex educational innovation. Such an innovation requires a considerable length of time to become fully implemented in a school district. It is not a program that can be "plugged in" at the start of the school year; rather, a gradual and extended implementation process should be employed. For the field test, it was expected that full implementation would require at least an entire school year. According to the developers of the approach, significant changes in student behavior and achievement might not occur in the first year of implementation of the approach since practitioners would still be acquiring proficiency in their roles and functions. A more realistic objective for a one year implementation is the helping of educational practitioners, particularly principals and teachers, to establish the proper conditions in schools and classrooms which research indicates will ultimately facilitate improvement in student learning. Nevertheless, the BSC considered the assessment of student outcomes to be a foremost objective of the field test.

Design issues

A second major limitation relates to the overall evaluation design. Perhaps the most critical problem in the field test is whether any observed changes or improvements in student behavior and achievement can be attributed solely to the effects of Achievement Directed Leadership or to other factors occurring in the field test district. There is widespread agreement among evaluation researchers that the most powerful way of demonstrating that an intervention has a real effect on some outcome is to employ an experimental design in which, typically, pre and posttests are given to a randomly selected group receiving the treatment and to other randomly selected groups receiving either no treatment or some variation. However, an experimental or quasi-experimental design was not appropriate or feasible for the field test for the following reasons. First, the New Jersey School District was interested in adopting the improvement approach on a district-wide basis. Under this condition, there would be no classes or schools within the district that could serve as valid controls or comparisons. Second, an experimental design would not have been feasible to implement given the administrative structure and operating constraints of the district. Third, pursuant to earlier discussions with the NIE, it was understood that an experimental design was not a desideratum of the field test.

One way that the field test evaluation dealt with the design problem was to compare results with national norms and baseline data. However, although norms and baseline data were available for the assessment of students' achievement, there were no comparable data for measures of program implementation and three of the student behavior variables (i.e.,

academic performance, student engaged time, and instructional overlap). There was no way of determining the status of these variables in the district in previous years; consequently, assessment of the impact of the approach on students was primarily limited to analysis of data gathered during the field test year (1981-82).

Interviews and observations with school and central office staff indicate that there were no major demographic changes during 1981-1982 that would account for substantial changes in student achievement and that no new instructional programs were introduced during the field test year.

Analytic issues

The third set of limitations relates to analytic issues. Two important considerations are unit of analysis and the data analysis model. Ideally, the preferred unit of analysis for examining achievement gains is the classroom because Achievement Directed Leadership is intended to directly affect students in the classroom, and because any other unit of analysis above the classroom fails to capture expected variation among teachers in their use of the approach. However, analyses were performed primarily at the school level and secondarily at the grade and/or district level because of the difficulty of obtaining implementation, process, and achievement data at the classroom level. For example, obtaining classroom level data would require gathering and matching achievement results from 1980, 1981, and 1982 on each student within a class. Massive manipulation of class lists and massive reorganization of 1980 and 1981 data would be required to perform this match. Considerable effort was expended in attempting to do this, but resulted in a final data set that included only about

40 percent of the 1981-1982 student population. Statistical tests demonstrated that this group was not representative of the overall group. In addition, implementation data at the classroom level were suspect, as discussed later in this section. Consequently, the lowest level unit of analysis chosen for impact assessment was the grade level. The match between students moving from one grade level to the next, while not perfect, was felt by district staff to be very good, and these data were much more easily obtainable than the classroom level data. The assumption made by the field test design is that the effects of grade level population changes were minimal.

Many authors have noted limitations that must be considered when the norm-referenced evaluation model is used to analyze achievement effects (e.g., Horst, Tallmadge, & Wood, 1975; Echternacht, 1978; Ozenne, 1978). While most researchers recognize these limitations, the model is still considered acceptable (e.g., U. S. Federal Register, 1979; Dermaline & Rader, 1981; Maye, 1981; Tallmadge & Wood, 1980) and is probably the most feasible and frequently-used evaluation paradigm for assessing achievement gains. The major limitation of the model relates to the assumption that the achievement status of the evaluation group remains constant relative to the norm group over the pre to posttest interval if no special treatment is provided. The validity of this assumption is unknown. Also, since the field test evaluation relied on available and accessible data, results by grade from year to year were based on different test levels. This represents a considerable problem for the interpretation of gains across years. The assumption that is made in the field test is that the norming procedures used in test standardization result in comparable samples for each

successive test level. Since schools were used as sampling units for the norming studies, this assumption seems reasonable. However, it must be recognized that the comparison groups do change, somewhat, from year to year.

Data issues

The final set of field test limitations has to do with the quality of implementation and classroom process data. Although the ideal case would have been for the BSC to collect hard, objective data, economic and feasibility constraints precluded that option. Consequently, all implementation and classroom process data were based on self reports. The reliability of this information at the classroom level is somewhat questionable and may, in many instances, give spuriously high estimates. For this reason, data were aggregated at the school level (for implementation) or grade level (for classroom process). In addition, due to the enormous quantity of qualitative information, data measuring similar variables were aggregated into summary indices. Although more confidence can be placed in these aggregated data, some fine details may be lost in the translation. The aggregated information on program implementation and classroom processes seems to give fairly accurate, although somewhat global, indicators of activities and events at the field test schools.

In summary, it must be recognized that the field test was not designed to be an experimental study. Because of this, several assumptions were made which limited the study's ability to establish causal relationships between program implementation and observed changes in student behavior and achievement. The evaluation limitations do not,

however, discount evidence gleaned from the field test. Rather, they emphasize the need for caution in interpreting results. Overall, the analysis of data collected during the field test provides a fairly accurate picture of the implementation and impact of Achievement Directed Leadership in the New Jersey School District.

CHAPTER FOUR

FIELD TEST FINDINGS: NEW JERSEY SCHOOL DISTRICT

This chapter presents the field test findings in the New Jersey School District regarding installation and implementation of Achievement Directed Leadership as well as the outcomes related to the improvement program. Following a brief overview of the district, field test findings are discussed in relation to the five levels described in the evaluation framework in Table 1 on page 19: BSC, district, principal, teacher, and student. The discussion of findings for each level indicates how the improvement process is expected to function at that level, what activities and outcomes actually occurred, and what conclusions can be drawn. The levels are interrelated in that results at the first four levels suggest expectations for outcomes at the student level. A section between the teacher and student levels summarizes program installation and implementation, and details how expectations for student level outcomes are derived. A concluding section summarizes field test findings in the New Jersey School District.

District Overview

The New Jersey School District was selected as the site for the field test because of its comprehensive implemention plans for Achievement Directed Leadership. Although the BSC had been working in this district for three years, the previous work involved only a few teachers in each of four elementary schools and focused on the development of classroom materials.

In 1978-79 two schools (Schools A and H) became development sites; a few basic skills teachers at each school were trained in an early version of the time management materials and worked through the improvement cycle once, i.e., classes were observed, opportunities for improvement identified, and strategies selected and implemented one time. School H was eliminated as a development site for the following year (1979-80) due to its small size and relatively high student achievement scores.

In 1979-80 a few basic skills teachers from School A, along with others from Schools C and G, were trained in time management; a few teachers from School A were also introduced to the management of instructional content. Teachers at School A worked through the improvement cycle for time management twice during the year; teachers at Schools C and G worked through the cycle once. Implementation of content management was not attempted at School A.

In 1980-81, selected teachers from all three schools were trained in the management of content. These teachers attended to instructional overlap throughout the year, in addition to working through the improvement cycle once for time management.

In 1980 the district acquired a new superintendent, an experienced urban educator who had been an assistant superintendent of another urban school district in the state. He felt that the BSC approach had significant potential for improving basic skills instruction and achievement, and decided to implement the approach in grades K-8 district-wide during the 1981-82 school year, the year of the field test. In addition, a former

high school administrator with strong professional interest in curriculum and instruction was appointed assistant superintendent. These top level administrators played major roles in implementing and maintaining the improvement program throughout the field test. Other key central office staff involved in the field test included the superintendent's administrative assistant and several staff from the district's newly created Department of Instruction (DOI). The superintendent's administrative assistant had been a respected district principal and was responsible for the district's testing program, scheduling, and communications. The DOI staff acted primarily as curriculum coordinators.

This district consists of eight elementary schools, one middle school, and a senior high school. All but the latter participated in the field test. Some characteristics of the nine field test schools are summarized in Table 3. Three field test elementary schools contained grades K-6 and five contained grades K-7. The middle school, with grades 7 and 8, was substantially larger than most of the elementary schools. However, the elementary schools also varied in size, with the average daily enrollment ranging from 152, at School H, to 573 at School F.

Although the district is relatively small, its student body had much in common with the student populations of many large urban areas: low socio-economic status, a high rate of student turnover (in 1979 more than 50 percent of the students were leaving the system before completing high school), low student achievement scores, and a high percentage of minority (90 percent) and English as Second Language students. In an effort to reverse the pattern of low achievement, the new superintendent, at the

Table 3

Description of Field Test Schools: New Jersey School District

Characteristics	School A	School B	School C	School D	School E	School F	School G	School H	School I
Grades in School	K-6	K-7	K-6	K-7	K-7	K-7	K-6	K-7	7-8
Average Daily Enrollment	377	259	431	328	323	573	317	152	662
Average Daily Attendance Rate	92%	91%	90%	93%	93%	90%	91%	91%	82%
Number of Classroom Teachers	20	17	18	18	17	32	14	8	27
Average Class Size	17	13	19	18	20	20	20	17	25
Average Years Experience of Teachers	Over 10	Over 10	Over 10	Over 10	Over 10	Over 10	5-10	Over 10	Over 10

time of his appointment, accepted the challenge of raising district test scores by the end of the 1982-83 school year. The strong interest of the school board in improving student achievement encouraged central office support of Achievement Directed Leadership, and probably accounts, in part, for the administration's insistence on full implementation of the program. The success in implementing the program as well as concomitant outcomes is discussed, by level, in the sections that follow.

The BSC Level

In Achievement Directed Leadership, the functions of the BSC, or any external agent, are to plan and deliver orientation and initial training, and to provide follow-up technical assistance to practitioners to help them implement the approach. The goal of the BSC is to transfer the planning, training, and implementation functions to local staff through a capacity-building approach. Responsibility for these functions should gradually shift from the BSC to the district. For example, regarding training, the BSC ideally provides district administrators with initial training in program concepts, models appropriate training skills, and directly assists in the district's own initial training efforts. The expected outcome of these activities is the district's ability to adequately conduct its own training for all staff. This section of the report briefly describes how the BSC performed the functions of an external agent as well as the outcomes of its efforts.

Orientation of Administrators

Although several New Jersey School District administrators were introduced to the time and content materials during the course of the earlier development process, all administrators scheduled to participate in full-scale implementation received a basic orientation to program concepts and field test requirements during May and June 1981. The BSC held a series of orientation meetings with the superintendent and his Administrative Council. The council was comprised of four assistant superintendents, another special assistant to the superintendent, and the president of the principals' association.[1] This series of meetings provided the council with a systematic overview of the program. As a result of the meetings, the council endorsed the improvement approach as a district priority for the coming school year and plans were made for scheduling and conducting orientation for all district principals. Principal orientation, conducted by BSC staff late in June, consisted of an overview of the principal's role and responsibilities within the program. This overview was intended as a brief introduction prior to formal principal training scheduled later in the summer.

Initial Training of Central Office Staff and Principals

Initial training of central office staff and principals in the time and content variables was conducted by the BSC during a week in late

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[1]The Council was later expanded to include the president of the local teachers' association.

summer devoted to general administrative training. Although most of the week was devoted to this training, part of the agenda also included other district business. Consequently, the amount of training time actually allocated to the program was somewhat less than originally anticipated and desired. Training workshops covered major program concepts and skills as well as implications for planning and implementing the approach at the individual school and classroom levels.

All principals and assistant principals in the district as well as most of the central office staff attended the time and content workshops conducted by the BSC. Participants from the central office included the superintendent, the assistant superintendent for curriculum and instruction, the assistant to the superintendent, and 11 members of the district's Department of Instruction (DOI). A total of 15 hours was devoted to training in management of the time and content variables, and to planning for implementation. In addition to the two major workshops presented during the week of administrator training, BSC staff conducted a half-day planning session with all administrators to prepare them for leading teacher orientation later in the fall. The primary BSC field person for the New Jersey School District felt that more administrator training would have been helpful.

In general, training was well received by central office staff and principals. Reactions to the training are summarized in Table 4. The results show a very high degree of satisfaction with all aspects of the training, with all workshop ratings in the "very good" to "superior" range. The highest ratings were given to the expertise of the training

Table 4

Summary of Participant Reactions to Training Workshops: New Jersey School District

Rating Category	Content Management Workshop Central Office Staff, Principals (n=26)	Time Management Workshop Central Office Staff, Principals (n=26)
Expertise of training staff	4.6	4.7
Quality of presentation/training	4.1	4.4
Quality of materials	4.4	4.5
Relevance of content	4.1	4.4
Likelihood that program will work in your situation	4.0	3.9
OVERALL RATING	4.2	4.4

Scale

5 = Superior
4 = Very Good
3 = Average
2 = Below Average
1 = Poor

Data sources: post-training questionnaires

staff. Participants in the training sessions were also asked to assess their understanding of the major training objectives and to indicate how confident they were in applying the concepts and techniques learned to a school situation. Detailed results are presented in Appendix E. Overall, administrators felt confident about their ability to perform the tasks needed to implement the improvement program. Most respondents to the training questionnaire did not report a need for further instruction and assistance, although a few principals who were interviewed after training expressed a desire for further assistance. Post-training interviews indicated that training was perceived as adequate. Comments suggested that administrators felt slightly more confident about their content implementation skills than their time implementation or teacher orientation skills. It was recognized that participation in the improvement effort represented a major change in principals' roles as instructional leaders. This caused some initial anxiety for a few principals, although most seemed reasonably comfortable with the modifications. Observations of the training sessions by BSC staff corroborated the post-training questionnaire and interview findings. However, observations indicated that the level of program understanding and skills varied considerably across principals and that level of commitment to the approach ranged from medium to high following the initial training.

In summary, the initial training provided by the BSC was generally perceived by central office administrators and principals as successful in providing the knowledge, skills, and commitment needed to begin implementation of the improvement approach in the New Jersey School District. Although, due to scheduling problems, the amount of training was somewhat

less than that suggested by the BSC, central office staff and principals were viewed by the BSC as sufficiently prepared to proceed with implementation plans.

Ongoing Support

BSC technical assistance and implementation support should ideally be minimal after initial program orientation and training because the school district should assume major responsibility for program implementation. However, since the field test was limited to a one-year effort, the BSC provided more hands-on assistance in the early stages than is suggested by the Achievement Directed Leadership model. Assistance from the BSC field staff was available to the district as needed. Field staff were called on numerous times throughout the year to attend meetings, help solve implementation problems, plan and model activities, answer questions, and reinforce understanding of major concepts.

The BSC played a major role in supporting the district's leadership seminars. These seminars were a series of working sessions incorporated within the superintendent's regular monthly meetings with principals. Since improvement was a district priority, seminars focused primarily on solving problems related to program implementation and on specific implementation planning issues. For example, the sessions focused on issues such as establishment of an overall management plan for the program, development of formal plans for conducting teacher training, discussion of principal/teacher conferences, and development of institutionalization strategies for the next school year. The sessions also served as a primary vehicle for providing follow-up training to principals. BSC staff

met with the superintendent and appropriate district leadership prior to each seminar to decide on roles and responsibilities for conducting the session. Initially, the BSC was a major contributor to the actual conduct of the seminars. However, the BSC involvement gradually diminished as the superintendent assumed more responsibility for planning and conducting the sessions. By mid-year, the superintendent's role was primary and that of the BSC secondary, as suggested by the improvement approach. Interviews with district administrators indicated that support received from BSC staff was perceived as adequate and beneficial.

In addition to regular leadership seminars with principals, periodic meetings were held with the superintendent and other central office staff so the BSC could help them with implementation. These meetings covered issues such as the principal/teacher conference form, students' daily success rate, and classroom implications of low and/or varied levels of students' entering achievement. As with the principals' leadership seminars, the BSC role in conducting these meetings gradually diminished as the superintendent assumed the major leadership role.

In addition to ongoing BSC support, the technical assistance services of another external agency, one of the state's regional Educational Improvement Centers (EICs), were made available to administrators and teachers. The EIC was an important partner in the development of the improvement approach in the New Jersey School District and EIC staff acted as back-up trainers during the field test. Assistance from the EIC was available on request, and its staff provided support on a limited basis during the field test.

Summary and Conclusions

Overall, initial installation of the program in the district was regarded as a success by central office staff. Training was well received and administrators were confident that they had acquired the necessary knowledge and skills needed to successfully implement all components of the program. Observations by BSC staff indicated that there was variation among principals in their skill development and initial commitment to the program. This suggested that the quality of implementation would vary at the school level. Ongoing support was provided throughout the year to supplement initial training and to assist in program planning, problem-solving, and maintenance. Follow-up assistance by BSC staff, and leadership training seminars were perceived by administrators as adequate and beneficial. As the school year progressed, district leadership, particularly the superintendent, gradually assumed more responsibility for program maintenance and implementation and the BSC role diminished as suggested by the program model.

The District Level

This section provides an account of implementation of Achievement Directed Leadership at the district level and addresses the question of how and to what extent central office staff performed their role-related functions: planning, training, and supervising. Numerous central office staff members had major responsibilities for installing and implementing the improvement approach in the New Jersey School District. Ideally, the BSC planning and training roles are assumed by these central office staff members who are then responsible for performing these functions at the

principal or individual school level. In addition, central office staff engage in participatory supervision with principals. In this process they monitor ongoing progress, and work with building administrators in planning and directing implementation activities. Actual implementation of the approach by central office staff is briefly described below in terms of each of the three major district level functions.

Planning

Comprehensive planning by central office staff was a necessary antecedent to successful program implementation. Implicit in all observed installation and implementation activities was a great deal of systematic planning. Planning specifically related to the field test began with the initial series of orientation meetings involving the BSC, the superintendent, and his administrative council. Planning activities continued throughout the year and concluded with the development of long-range plans for future school years. Each major decision regarding training and implementation was preceded by comprehensive planning. For example, extensive planning was required for such tasks as:

- preparing program budgets
- allocating necessary resources
- scheduling training sessions
- defining staff roles and responsibilities
- determining participatory-supervision procedures
- specifying training content
- structuring classroom observations

- developing curriculum guides
- solving problems.

Central office staff used planning checklists developed by the BSC to guide their planning efforts (see Appendix F).

The superintendent was the key figure in the district's planning effort. Following the initial planning and training activities conducted during the summer, he developed a comprehensive "mission statement" for the district, outlining plans for improvement throughout the school year. This mission statement incorporated all key elements of the improvement approach and became the basis for district level planning for the field test year. District goals were set, staff roles and responsibilities were explained, and procedures for reaching goals and assessing performance were detailed. The superintendent followed the plans he outlined in his mission statement through his continuing, active role in the improvement effort. Plans were systematically reviewed and updated through the series of leadership seminars and other planning sessions described in the BSC level section of the report. As previously noted, although the BSC contributed heavily to the planning process in the early stages of program installation and implementation, the superintendent gradually assumed the primary planning role.

Several other central office staff assisted the superintendent in the planning process. Whereas the superintendent was responsible for policy planning, other administrators were given responsibility for planning the specific ways that the policies would be carried out. For example, the assistant superintendent for curriculum and instruction was charged with planning all training activities as well as planning a district-wide

curriculum for basic skills. The assistant superintendent worked on these planning activities with the members of the Department of Instruction (DOI). The curriculum planning task was of central importance to content management. This planning effort resulted in the development of a curriculum mapping guide titled the Basic Skills Curriculum Guide (A Management Guide) for Reading, Language Arts and Mathematics Grades K-8, which was analogous to the "School Year Planning Guide" specified by Achievement Directed Leadership. The mapping guide indicates those basic skills objectives included in the district's testing and assessment program for each grade level. The guide was intended as an overall plan for instructional content to be covered by each classroom teacher during the course of the school year.

A DOI staff member was paired with each principal to assist in planning at the school and classroom levels. In general, these staff worked closely with principals in planning for program implementation. District planning consisted of all preparations that were made to assure that principals, and to a lesser degree, teachers, carried out their functions properly. However, the level of DOI involvement varied somewhat across schools. In addition, many DOI staff reported that their level of involvement at individual schools lessened as the year progressed. In interviews administered at the end of the year, DOI staff reported that they spent an average of 12 percent of their time throughout the year performing all program related activities, including planning, training, and supervision.

Training

The improvement approach suggests that the BSC train central office staff who, in turn, train principals who, in turn, train teachers in the management of the instructional variables. As previously noted, initial BSC training in the New Jersey School District was directed at both central office staff and principals. The superintendent, in conjunction with central office and BSC staff, provided follow-up training to principals throughout the school year during leadership seminars.

Although it was intended that principals assume primary responsibility for teacher training, DOI staff were paired with each principal and assisted in teacher training activities. The extent of their involvement varied widely across schools depending, in large part, on each principal's knowledge, skills, and commitment to the program. At some schools, DOI staff assumed the entire responsibility for teacher training while at others they played a relatively minor role. Specific outcomes of teacher training for each school are discussed in the principal level section.

Participatory Supervision

The concept of participatory supervision at the district level requires that central office staff participate with principals in a variety of ways in order to strengthen the principals' problem-solving abilities and to reinforce their work with teachers in using the improvement cycle. The district superintendent assumed a very active role in the participatory supervision process and engaged in continuing dialogue with principals concerning program implementation throughout the school year. A major formal vehicle for this dialogue was the district/

principal conference. Two conferences were conducted with each of the nine principals involved in the program. These conferences provided an opportunity for the superintendent and principal to discuss the critical dimensions of the school and the classroom and to review plans and activities. The superintendent indicated that the conferences were beneficial both in helping him focus his own ideas on instruction and in assuring that principals were constantly aware of the instructional issues addressed by the improvement program. In addition to the district/principal conferences, DOI staff assigned to each school monitored program implementation and worked with principals to solve problems and make sure that program operations were following plans.

Summary and Conclusions

Overall, central office leadership in the improvement effort was very strong with the superintendent taking a very active role in most aspects of planning and actual implementation. The superintendent, along with the assistant superintendent for curriculum and instruction, engaged in cooperative problem-solving with all DOI staff and principals at each of the test schools. Jointly, the superintendent, DOI staff, and other central office staff were responsible for district-wide planning and training. The DOI staff cooperated with individual principals in planning and teacher training and monitored principals' progress throughout the year.

Participation of central office staff in the improvement program represented a considerable change in their roles and responsibilities as

instructional leaders. Table 5 summarizes information relating to perceptions of these role changes. All central office staff and most principals felt that central office staff spent more time during the field test year supporting basic skills instruction than in the previous year. Although many teachers agreed with this, several did not see a change in the amount of time since they had worked with DOI curriculum coordinators previously, although in substantially different roles. Principals and central office staff also agreed that the efforts of district level staff in supporting basic skills instruction were more effective than in the previous year. Many teachers were not sure of the effectiveness of central office support since they had not seen the district's test results at the time of the survey and had minimal access to district-wide information.

In summary, central office staff involvement in implementing the program was very strong. The superintendent was very committed to the improvement approach and provided the extensive support necessary for its success. All district level planning and participatory supervision functions were effectively carried out in accordance with the program model. Although the BSC rather than the central office trained principals, a deviation from the model, all necessary training and support were available and seemed to be successful.

Principal Level

The basic functions of the principal in the improvement process are essentially the same as those of central office staff: planning, training, and supervising. Principals are a critical link in improving

Table 5

Summary of Central Office Staff Implementation of Achievement Directed Leadership: New Jersey School District

Indicator	Respondent Group	Perceived Change
Perception of time central office staff spent supporting basic skills instruction in the schools, relative to prior year	Central Office Staff	Increase (all indicated increase in working directly with schools)
	Principals	Increase (82% indicated increase in working with them)
	Teachers	Uncertain (42% reported increase, others not sure)
Perception of effectiveness of district in supporting basic skills instruction, relative to prior year	Central Office Staff	Increase (all indicated marked increase in effectiveness)
	Principals	Increase (all indicated increase in effectiveness)
	Teachers	Uncertain (40% reported increase, others not sure)

Data sources: end-of-year questionnaires and interviews

schools. They are responsible for translating global, district-wide policies into action plans for guiding and monitoring instructional improvement at their school. Principals perform the three major functions at their schools by working closely with central office staff and teachers in planning improvement activities, providing or arranging training experiences, and engaging in participatory supervision with teachers as they work together through the improvement cycle. Principal activities are briefly described below in terms of the three major functions.

Planning

As was the case for central office staff, comprehensive planning by principals was a necessary antecedent to successful program implementation. Systematic planning was implicit in all observed activities at the principal level. Principals planned collaboratively with DOI staff and teachers in scheduling and preparing for teacher orientation and training, structuring participatory supervision activities, and providing instructional leadership related to the content and time variables. In general, principals followed the planning outlines for these activities as specified in the Instructional Planning checklists provided by the BSC. These checklists are included in Appendix G.

Much of the principals' planning efforts in the early part of the school year involved preparing for teacher orientation and training. Planning tasks included scheduling, determining faculty participants, setting agendas, handling logistics, and preparing for actual presentations. During the school year, planning focused on implementation issues concerning the two major focus variables (student engaged time and

instructional overlap) and on the participatory supervision process. Examples of these planning tasks were identifying prior learning data, assisting in curriculum matching activities, identifying appropriate instructional materials, identifying appropriate improvement strategies, arranging necessary inservice activities, developing schedules for classroom observations and principal/teacher conferences, and clarifying procedures for conducting observations and conferences.

Table 6 briefly summarizes principal level implementation at each school in terms of planning, training, supervisory activities, and attitudinal reaction to the program. Although all principals participated in the planning process to some degree, there was variation across schools in the amount of planning. All except one principal (School H) reported that they spent more time planning with teachers during the field test year than they did in previous years. However, teachers' perceptions of changes in their principal's planning role differed. At four schools (Schools B, C, D, and G) they agreed with their principals that more time was devoted to planning, but teachers at two schools (Schools A and I) indicated that this was not the case. Teachers at other schools had mixed opinions about the relative amount of principal planning. In addition to findings presented in Table 6, all principals reported in end-of-year interviews that the program helped them become more successful in helping teachers plan basic skills instruction.

Training

Achievement Directed Leadership suggests that principals deliver training in the improvement approach and the relevant instructional

Table 6

Summary of Principal Implementation
of Achievement Directed Leadership: New Jersey School District

	S C H O O L								
Principal Level Variables and Data Source	A	B	C	D	E	F	G	H	I
Did principal spend more time planning with teachers than in previous years? (principal questionnaire)	+	+	+	+	+	+	+	-	+
Did teachers feel that principals spent more time planning with them? (teacher questionnaire)	-	+	+	+	+/-	+/-	+	+/-	-
Did principal conduct inservice training relating to program? (observations)	+	district led	+	+	+	led by district and Vice Principal	+	district led	+
Average number of observations per teacher (teacher questionnaire)	8.5	6.6	6.4	6.3	6.4	7.5	6.3	8.2	5.1
Average number of conferences per teacher (teacher questionnaire)	2.8	3.2	3.9	3.2	3.9	3.8	3.0	4.8	[illegible]
Average number of conferences per teacher (principal conference forms)	2.5	2.5	2.6	3.2	2.6	2.8	2.4	2.8	2.3
Did principal feel that overall effectiveness of school's basic skills instruction increased? (principal questionnaire)	+	+	+	-	+	+	+	-	+
Did teachers feel the school's effectiveness in providing basic skills instruction increased? (teacher questionnaire)	+	0	0	0	-	0	+	0	+
Attitudinal reaction of principals to program (observations, interviews, and principal questionnaire)	Positive	Negative	Neutral	Neutral	Positive	Neutral	Positive	Negative	Positive

Key: + = Yes from a majority of respondents;
- = no from a majority of respondents;
0 = "not sure" from a majority of respondents;
+/- = divided opinion, i.e., an equal number of yes/no responses.

variables to teachers at their respective schools. As indicated in Table 6, this paradigm was employed at six of the nine schools participating in the field test. At the other schools, DOI staff assumed major responsibility for delivering teacher training. Orientation and training activities were conducted at the same time at the nine schools. A general orientation was given during the first day of school. Content training was delivered in a three-hour inservice session later in September, while time training was delivered in a two-hour session in early October. All teachers participated in the training workshops. BSC staff observed training sessions at a sample of schools. These observers reported that although training generally followed program specifications, the quality of the presentations and the attentiveness of the audiences varied across schools. Observers also noted that the content sessions seemed to go more smoothly than the time sessions at most schools.

All participating teachers completed post-training questionnaires where they indicated their reactions to the training workshops and assessed their acquired knowledge and skills related to program concepts. Results are briefly summarized in Table 7. Overall reactions to the training were very positive at most schools. The ratings for expectations regarding the likelihood of program success were somewhat lower than the ratings for overall reaction to the training. In fact, teachers at three schools (Schools B, C, and H) were doubtful that the time component of the program would work in their schools. BSC observations indicated that there were some problems with training workshops at these schools. Overall, teachers at all schools felt confident that they had acquired the knowledge and skills needed to successfully implement the improvement

Table 7

Summary of Teacher Training Results: New Jersey School District

	School									All Teachers
	A	B	C	D[a]	E	F	G	H	I[a]	
CONTENT										
Total number of teachers[b]	25	17	23	--	24	41	21	8	--	159
Overall reaction to training[c]	3.9	4.1	3.7	--	4.4	4.0	3.7	4.4	--	4.0
Program expectations	3.5	3.6	3.1	--	3.8	3.8	3.4	3.3	--	3.5
Overall assessment of knowledge/ skill development	4.0	4.5[d]	4.1	--	4.3	4.1[d]	4.5	4.7[d]	--	4.3
TIME										
Total number of teachers[b]	25	14[e]	14	20	24	30	18	14[e]	--	145
Overall reaction to training[c]	3.9	3.5	2.8	3.8	4.4	4.0	4.1	3.5	--	3.9
Program expectations	3.0	2.7	2.1	3.2	3.8	3.4	3.8	2.7	--	3.3
Overall assessment of knowledge/ skill development	3.8	4.3	3.5	3.7	4.0	3.9	4.5	4.3	--	3.9

Scales: Reaction and Expectations

5 = Superior
4 = Very Good
3 = Average
2 = Below Average
1 = Poor

Self-Assessments

5 = On my own
4 = With further study (content), or with planning
3 = With some assistance
2 = Only with further instruction and assistance
1 = Even with further instruction, may not be able to do

a Results not available for School D (content) and School I (time and content)
b Teacher "n"s vary somewhat, by question
c Summary of reactions to staff, presentation, materials, and content relevance
d Assessments based on five of ten items; other items omitted
e Time training combined for Schools B and H

Data sources: Post-training questionnaires

process, although the ratings for time were lower than those for content. Interviews with a sample of teachers at the end of the year indicated that program implementation became easier as they worked through the improvement cycle and became more familiar with the practical application of program concepts. In summary, teacher training was generally regarded as successful in providing the prerequisite knowledge and skills needed for program implementation at the classroom level. However, some problems were observed in terms of the apparent level of teacher commitment and expectations at certain schools. This suggested that variations in subsequent program implementation might be expected.

Participatory Supervision

Participatory supervision at the principal level is analogous to that described at the district level, in that principals monitor teachers' performance related to program functions and engage in continuing dialogue with teachers on instructional improvement. Principals observe basic skills classroom instruction, work with teachers in identifying opportunities for instructional improvement in the classroom, and assist teachers in the selection, implementation, and evaluation of improvement strategies. The primary vehicles for this supervision are structured classroom observations and principal/teacher conferences.

Table 6 on page 56 also presents information on the average numbers of classroom observations and principal/teacher conferences reported for each school. Most teachers reported that principals observed their classes approximately six times and followed-up with an average of about

three conferences.[2] These results indicate that district plans for participatory supervision were carried out at virtually all schools. Interviews with principals and teachers regarding the quality of participatory supervision suggest that the activities were beneficial and fostered improvement in basic skills instruction. Principal and teacher questionnaire data on improvement of basic skills instruction, as summarized in Table 6, corroborate the interview comments, although teachers at five schools were uncertain whether improvements had occurred. Almost all teachers and principals welcomed the opportunity to talk together on a one-on-one basis about classroom instruction, and several principals reported that they were glad that the structured observations "forced" them to visit classrooms.

Also included in Table 6 is a summary of each principal's overall attitudinal reaction to the program. Four principals had positive attitudes, three had neutral attitudes, and two had negative attitudes. In the two schools (Schools B and H) where the principal had a negative attitude, the training of teachers was conducted by central office staff, not by the principal. The principal's attitude did not appear to significantly influence the number of principal/teacher conferences or classroom observations conducted by the principal.

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[2]Two sources of self-report data were available regarding the number of conferences. The accurate total probably lies between the two reported figures.

Summary and Conclusions

In general, implementation of Achievement Directed Leadership at the principal level proceeded according to plans although some variation among schools was observed. Systematic planning preceded all principal level activities. Teacher training was generally regarded as successful, and principals carried out their supervisory activities as planned. Principals felt that the approach was successful in improving their school's effectiveness in providing basic skills instruction, but teachers were not sure since they had not seen students' test results.

Principals varied in their attitudinal reactions to the program. Their attitude appeared to influence their participation in teacher training, but not the number of principal/teacher conferences and classroom observations they conducted.

Variations in principal level implementation for each school are summarized in Table 8 in terms of summary indices[3] for each of four important principal level variables: attitude toward program, classroom observations, principal/teacher conferences, and training results. The indices indicate for each variable whether level of implementation can be described as high, medium, or low with respect to program expectations. The overall principal implementation index summarizes the indices of the four variables and reflects the variation between schools in the degree of principal level implementation. As indicated in Table 8, implementation at the principal level was rated high at one school (School E), medium at five schools (Schools A, D, F, G, and H), and low at three schools

[3]Specific rules for assigning indices are discussed in Appendix D.

Table 8

Summary Indices[a] for Principal Implementation
of Achievement Directed Leadership: New Jersey School District

School	Indices[a] for Principal Level Variables[b]				Sum of Indices	Overall Principal Implementation Index
	Attitude Towards Program	# Classroom Observations	# Principal/ Teacher Conferences	Training Results		
A	3	3	1	2	9	Med
B	1	2	1	2	6	Low
C	2	2	2	1	7	Low
D	2	2	2	2	8	Med
E	3	2	2	3	10	High
F	2	3	2	2	9	Med
G	3	2	1	3	9	Med
H	1	3	3	2	9	Med
I	3	1	1	2[c]	7	Low

[a]Indices describe whether implementation is considered relatively high (index = "3"), medium (index = "2"), or low (index = "1"). Specific rules for assigning each index are discussed in Appendix D.

[b]Data sources: end-of-year questionnaires, surveys, and principal/teacher conference forms.

[c]Data not available, assigned average value.

(Schools B, C, and I). When these measures are combined with teacher implementation indices, an overall school implementation index is derived which suggests expectations regarding student achievement. Teacher and school implementation indices are presented in subsequent sections of the report.

Teacher Level

Implementation of Achievement Directed Leadership at the teacher level involves using the improvement cycle to guide planning, classroom management, and instruction. Teachers are expected to use the improvement cycle to set instructional goals, identify opportunities for improvement, and make necessary changes in instructional procedures. In the improvement cycle, teachers attend to several targeted classroom variables: prior learning, student engaged time, instructional overlap, and academic performance. The following section briefly describes use of the improvement cycle during the field test by basic skills teachers in the New Jersey School District.

Teachers Use of the Improvement Cycle

The degree to which teachers actually implemented components of the improvement approach in their classrooms varied widely across schools. Table 9 summarizes information reported by teachers concerning their use of Achievement Directed Leadership during the year, as well as their perceptions regarding its effectiveness and their general reactions to it. All data are based on responses to the Teacher Questionnaire administered to participating teachers at the end of the field test.

Table 9

Summary of Teacher Implementation
of Achievement Directed Leadership: New Jersey School District

Teacher Level Variables[a] – percent of teachers who:	SCHOOL A N=13	B N=10	C N=14	D N=11	E N=16	F N=23	G N=16	H N=6	I N=18	District Total
Used research to set goals and improve instruction	81	70	57	95	64	61	67	45	79	69
Made improvements regarding targeted instructional variables	78	34	40	78	67	63	97	40	76	64
Succeeded in obtaining appropriate levels of targeted instructional variables	72	67	58	51	53	61	72	46	64	61
Made changes in planning, instructional management, and teaching techniques	52	53	33	55	47	55	72	33	42	49
Judged own classroom instruction in basic skills more effective this year	77	40	43	55	43	64	60	25	59	54
Attitude toward program, end-of-year (mean rating, scale 1 - 5[b])	3.2	2.5	2.5	3.0	2.9	3.0	3.5	1.6	3.3	2.9

[a] Data source: end-of-year questionnaire; the figures in the table indicate the percentages of teachers who responded "yes" to questions that correspond to the teacher level variables (except for the attitudinal results)

[b] Attitude Scale
1 - very negative
2 - negative
3 - neutral
4 - positive
5 - very positive

The majority of teachers (69%) reported that they used research findings as well as classroom data to set improvement goals for their classrooms and to improve their teaching. This ranged from a low of 45 percent in School H to a high of 95 percent in School D. Sixty-four percent of the teachers, ranging from a low of 34 percent in School B to a high of 97 percent in School G, reported that they made improvements regarding the targeted instructional variables. Sixty-one percent, ranging from a low of 46 percent in School H to a high of 72 percent in Schools A and G, perceived that they were successful in obtaining appropriate levels of these variables in their classrooms. More specifically, teachers indicated that they attended to prior learning, instructional overlap, student engaged time (SET), and, to a lesser degree, academic performance. Examples of activities related to each of these variables are noted below.

To obtain prior learning data, a standardized diagnostic/prescriptive test was administered to all students in mid-September. Results for each student were provided to teachers on each skill tested. In addition, teachers were given students' 1981 summary scores on the California Achievement Test (CAT), which indicated each student's general level of achievement. Most teachers reported that they used these data in planning classroom instruction, although many felt that they were not as successful in attending to prior learning as they were for SET and instructional overlap. Although teachers were introduced to the importance of prior learning, training was not as comprehensive as it was for the two variables mentioned above.

All teachers were given the curriculum mapping guide developed by the district to indicate the overlap between instructional objectives and test content. In previous years the concept of "mastery learning" was emphasized throughout the district. However, during the field test year instructional overlap was to receive equal emphasis. District policies directed teachers to cover all objectives during the course of the year. Teachers translated objectives listed in the district's curriculum mapping guide into their own "Quarterly Topic Plans." These plans took students' strengths and weaknesses into account and represented teachers' instructional plans for each quarter. Each teacher's plan was unique. Teachers discussed progress with respect to their plans with principals during their principal/teacher conferences. Most teachers reported that they were successful in achieving very high overlap with test objectives during the course of the field test.

As noted in the discussion of the principal level, teachers reported that their classes were observed an average of five to eight times during the year. These observations consisted of a series of scans (i.e., 1-3 minutes) during which each student's behavior was classified as engaged or unengaged. Teachers were thus made aware of students' use of instructional time. Teachers discussed results with principals during conferences and, when necessary, they designed strategies for improving the daily average SET for their class. Most teachers reported that they made instructional improvements in their classrooms to increase SET and most felt that they were successful in achieving high SET.

The fourth variable targeted for improvement, academic performance, involved attending to students' daily success, mastery of content, and

review of content. At the time of the field test, the BSC had not developed formal procedures for training educators in this variable, although teachers were made aware of its significance. Although teachers at many schools reported that they made some classroom improvements in these areas, they did not feel that they were as successful in dealing with academic performance as they were for other target variables.

According to the program model, teachers can affect the levels of the instructional variables in their classrooms by making changes in instructional processes, such as instructional planning, classroom management, and delivery of instruction. Although many teachers (49%) reported that they made changes in these processes, particularly with regard to planning, overall changes reported at several schools (Schools C and H) were relatively minor. For the most part, teachers indicated that they did not actually change their teaching techniques.

Teachers' perceptions of program success in improving the effectiveness of basic skills instruction in their own classrooms varied widely across schools. A majority of teachers (54%) felt that instruction was more effective during the field test year than in other years. This ranged from a low of 25 percent in School H to a high of 77 percent in School A. Many teachers indicated that their basic skills instruction was effective in prior years, as well as in the field test year. Finally, many teachers were not sure if instruction was more effective since they had not seen students' test results.

Teachers at most schools reported neutral attitudes toward the program. Reactions were negative at a few schools. While many teachers

felt that the program was valuable, many also indicated that it required a great deal of additional work.

Summary and Conclusions

Overall, program implementation at the teacher level was regarded as successful in terms of expected instructional activities in the classroom. Field test teachers, in general, reported that they used research information to guide the instructional improvement process and indicated that they attended to targeted instructional variables. A majority of them seemed to adequately implement the improvement approach.

However, considerable variation in the reported degree of teacher implementation was observed between schools. Teachers' reports of their activities indicated that overall implementation was relatively high in relation to the program model at some schools, but relatively low at other schools. Table 10 presents information on teacher implementation in terms of summary indices for each of the data categories described in Table 9 and in the preceding narrative. Specific rules for deriving the summary indices are discussed in Appendix D. The overall teacher implementation index suggests that teachers engaged in the improvement process to a high degree at two schools (Schools A and G), to a medium degree at four schools (Schools B, D, F, and I), and to a low degree at three schools (Schools C, E, and H). In the next section, these measures are combined with principal implementation measures to produce overall school implementation indices which suggest expectations for student achievement.

Table 10

Summary of Indices[a] for Teacher Implementation of Achievement Directed Leadership: New Jersey School District

	Indices for Teacher Level Variables[b]							
School	Research Use	Instructional Improvements	Success in Implementation	Changes in Teaching Behavior	Improved Classroom Effectiveness	Attitudes Toward Program	Sum of Indices	Overall Teacher Implementation Index
A	3	3	3	2	3	2	16	High
B	3	1	2	2	1	1	10	Med
C	2	1	2	1	1	1	8	Low
D	3	3	2	2	2	2	14	Med
E	2	2	2	1	1	1	9	Low
F	2	2	2	2	2	2	12	Med
G	2	3	3	3	2	3	16	High
H	1	1	1	1	1	1	6	Low
I	3	3	2	1	2	2	13	Med

[a] Indices describe whether implementation is considered relatively high (index = "3"), medium (index = "2"), or low (index = "1"). Specific rules for assigning each index are discussed in Appendix D.

[b] Data source: End-of-year questionnaire.

Summary of Program Installation and Implementation in the New Jersey District

The New Jersey District agreed to full-scale program implementation, and was, therefore, the focus of the field test evaluation. To a large extent, the success of the field test was dependent on the degree to which the district actually followed through with its plans for comprehensive implementation. This section summarizes the actual degree of installation and implementation as reported for the four preceding levels.

Initial installation of the program at the district level was generally regarded as a success by central office staff and principals. Training of central office staff and principals was well received, and these administrators were confident that they had acquired the knowledge and skills needed to successfully implement all components of the program. Leadership training seminars and ongoing follow-up support by BSC staff were also perceived as being adequate and beneficial. This support, while considerable in early stages of the field test, gradually diminished as district leadership assumed the major role in guiding and maintaining the improvement effort.

Central office involvement in the improvement process was very strong. The superintendent was highly committed to the improvement approach and provided the support necessary for its success. Some central office personnel (i.e., DOI staff) worked very closely with each of the elementary school principals in planning, training, supervising, and providing technical assistance to teachers. Central office staff, themselves, perceived that their role had changed from the previous year

and that they were more supportive of basic skills instruction at the school level than in the previous year.

Implementation at the school and classroom levels generally followed the plan outlined by the program model. For the most part, principals performed planning, training, and supervising activities as expected. However, some variations across schools were observed with respect to the actual degree of implementation and the apparent level of commitment to the improvement effort. Likewise, teacher activities, in general, followed the model. Teachers reported that they used research to guide instructional improvement, attended to targeted classroom variables, and perceived that they were successful in reaching and maintaining appropriate levels of the targeted variables in their classrooms. However, as with principals, levels of teacher implementation and apparent commitment to the approach varied widely across schools.

Information on levels of principal and teacher implementation of the improvement approach was categorized in terms of summary indices as described in preceding sections and in Appendix D. These summary indices describe whether principal or teacher implementation was high, medium, or low with respect to expectations suggested by the program model. An overall school implementation index was derived by combining the principal and teacher indices. The specific variables for each level encompassed by the overall school index are:

- o Principal Level
  - attitude toward program
  - number of classroom observations conducted

- number of principal/teacher conferences conducted
- training outcomes (participant reactions and self-assessments of knowledge and skills).

o Teacher Level

- use of research to guide instructional improvement
- improvement in classroom instruction in terms of program focus variables (relative to prior years)
- changes in instructional planning, classroom management, and actual classroom instruction
- perceived success in implementation
- perceived effectiveness of classroom instruction
- attitude toward program.

High indices for any of the above variables indicate that the teacher or principal behavior or attitude is at a level which closely approximates an ideal implementation of the program with respect to that particular variable. Low indices, on the other hand, indicate that implementation is well below desired levels. Medium indices fall between these extremes; they suggest that implementation, although not perfect, is generally satisfactory but not of sufficient magnitude to warrant a high rating. As Appendix D indicates, decision rules for the assignment of indices were somewhat arbitrary. However, they are useful as gross descriptors of relative levels of implementation.

Table 11 presents the overall summary indices for principal and teacher implementation (also see Tables 6, 8, 9 and 10) as well as an overall schoolwide implementation index for each school. The overall schoolwide index represents the sum of the four principal level indices and the six teacher level indices, and is, accordingly, influenced more by

Table 11

Summary of Schoolwide Implementation
of Achievement Directed Leadership: New Jersey School District

	S C H O O L								
Index	A	B	C	D	E	F	G	H	I
Principal Level Implementation	Med	Low	Low	Med	High	Med	Med	Med	Low
Teacher Level Implementation	High	Med	Low	Med	Low	Med	High	Low	Med
Overall Schoolwide Implementation	High	Low	Low	Med	Med	Med	High	Low	Med

[a]See Appendix D for discussion of pr cedures for assigning indices.

teacher behaviors than by principal behaviors. The rationale for this weighting schema is that classroom level implementation will, most likely, have a greater effect on student achievement and that teacher indices are more reliable given the larger samples.

The results suggest that level of implementation varied widely across schools with two schools (Schools A and G) having "high" indices, four schools "medium" indices (Schools D, E, F, and I), and three schools "low" indices (Schools B, C, and H). The source of the variation is not readily apparent. Some variation occurs as the improvement process flows through each successive level of the hierarchy. However, it should be noted that the degree of teacher level implementation did not necessarily follow from the degree of principal level implementation. Prior involvement also may have affected implementation during the field test year. Both "high" implementation schools had participated in the development of Achievement Directed Leadership during previous school years, although not on a schoolwide basis. However, the other two schools that participated in development (Schools C and H) were rated as "low" implementation schools.

One probable major source of variation is level of commitment of principals and teachers, an area that was not formally assessed during the field test. Scriven (1973) suggested that degree of motivation and commitment may have a large influence on implementation of educational innovations. Following this line of thought, Lipe and Haveman (1977) posited four levels of commitment in field test situations which may help to describe the variations in implementation between schools in the New

Jersey School District. They categorize field test participants as: (1) agressively resistant, (2) passively resistant, (3) personally committed, or (4) group committed.

Each of these four levels of commitment was observed by BSC staff in one or more of the field test schools. Where the principal and teachers were either actively or passively resistant, school implementation seemed to be low. Where some individuals, but not the entire group, were committed, school implementation appeared to be medium. Where there was group commitment, school implementation was regarded as high. Thus, level of commitment seemed to be a major factor in implementation behavior.

In conclusion, the degree of implementation of Achievement Directed Leadership can be considered as moderate in the New Jersey School District. All schools attended to the time and content variables and implemented the process to some degree, although some schools were more committed than others to the overall approach according to BSC observations. This variation in commitment seemed to account for variations in overall levels of implementation among schools.

Student Level

The hypothesis of the field test was that installation and implementation of Achievement Directed Leadership at the four levels described above would affect students' classroom behaviors and academic achievement. The actual degree of implementation at each school would logically affect the degree to which student outcomes at each school are influenced. Program effects at the student level are described below in terms of student behaviors/classroom processes and basic skills

achievement. A final subsection describes the relationship between student outcomes and level of installation/implementation.

Student Behavior/Classroom Process Outcomes

As indicated in the discussion of program implementation, New Jersey School District principals and teachers generally addressed all of the classroom focus variables, although to varying degrees. Targeted classroom process variables include prior learning, student engaged time, instructional overlap, and academic performance. Outcomes for each of the variables are discussed below, although data for some variables were not sufficient to allow conclusions to be drawn.

Prior learning. Teachers indicated that they attended to students' prior learning strengths and weaknesses in planning instruction and attempted to remediate deficiencies throughout the school year. Detailed diagnostic results for each student indicating mastery or nonmastery of specific skills were given to teachers at the beginning of the year. However, a comprehensive analysis of these detailed diagnostic tests is beyond the scope of this report. The only conclusions that can be made regarding prior learning are that adequate information on prior learning was available to teachers and that they reported that they used this information.

Student Engaged Time. In training in the management of students' classroom time, it is suggested that if students spend a specified amount of engaged time in basic skills instruction during the school year, corresponding growth in student achievement may be expected. These expectations are based on data from the Stallings and Kaskowitz (1974) study of

Follow Through eligible classrooms and the Beginning Teacher Evaluation Study (Fisher, Filby, Marliave, Cahen, Dishaw, Moore, & Berliner, 1978). Based on the actual level of student engaged time (SET), one would predict students' test scores to exceed expected[4] achievement levels, to fall below expected levels, or to equal expected levels.

Data on student engaged time were collected during observations in each basic skills classroom in the New Jersey School District (see principal level, p. 59). Teachers compared their classroom data to data from the research base to establish SET goals, and their SET data from subsequent observations gave the empirical feedback on how well they were achieving their goals. Goals were typically set in the SET range where student achievement would be in the above expected range.

Table 12 indicates the average daily SET, computed across the observations (approximately six total), for each school in reading and mathematics. In addition, the percent of classes in each expected achievement range is presented and a school summary index is provided which is an average of all classroom SET indices. Since research data can not be extrapolated to seventh and eighth grades, indices for these grades were not computed, and, therefore, are not part of the school summary indices. This summary index provides a general indication of what would be expected in terms of student achievement growth given the average SET levels. Overall, observed SET was high across the district. A majority of

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[4]Expected levels of achievement are defined as typical rates of growth relative to national norms, i.e., no gain in NCE scores from year to year.

Table 12

Summary of Student Engaged Time (SET): New Jersey School District

Reading[a]

School	No. of Classes	% in Below Range	% in Expected Range	% in Above Range	Average SET (Min./Day)	SET Index[b]
A	15	13%	33%	53%	128	3
B	12	67%	0	33%	90	2
C	16	31%	31%	38%	108	2
D	12	33%	50%	17%	95	2
E	16	6%	19%	75%	132	3
F	23	4%	9%	87%	126	3
G	12	0	17%	83%	125	3
H	7	0	43%	57%	120	3
I	(15)	-	-	-	(56)	-
Total	113	18%	23%	59%	116	3

Mathematics[a]

School	No. of Classes	% in Below Range	% in Expected Range	% in Above Range	Average SET (Min./Day)	SET Index[b]
A	14	7%	57%	36%	46	3
B	12	0	17%	83%	58	3
C	16	0	38%	63%	50	3
D	12	8%	17%	75%	55	3
E	16	31%	13%	56%	46	2
F	23	4%	17%	78%	57	3
G	12	0	33%	67%	55	3
H	7	0	0	100%	66	3
I	(10)	-	-	-	(50)	-
Total	112	7%	25%	68%	54	3

[a]SET Index not appropriate for grades 7 & 8; averages for these grades not included in totals

[b]Index Key
1 = Below expected rate.
2 = At expected rate.
3 = Above expected rate.

Overall school indices are an average of all classroom SET indices, and, therefore, do not always reflect the average daily SET for the school.

elementary school classes in both reading and mathematics reported SET levels which indicated that student growth should exceed expected levels, although three schools (Schools B, C, and D) had reading SET levels in the expected achievement range, and one school (School E) had mathematics SET levels in the same range. In summary, teacher goals for maintaining high levels of SET were achieved in most classes throughout the district. Assuming that the average SET from all observations for each class was representative of the entire school year, one would expect that student achievement gains would be correspondingly high.

Instructional overlap. Instructional overlap is operationally defined as the percent of test objectives covered by teachers in actual classroom instruction. Research has demonstrated that students' achievement relative to expected growth is strongly influenced by the degree of instructional overlap with the test (Brady, Clinton, Sweeney, Peterson, & Poynor, 1977). Depending on the amount of overlap, growth in student achievement may be expected to exceed, equal, or fall below predicted levels. As was the case with SET, indices can be assigned for each of these three ranges of expected growth.

Data on amount of instructional overlap were collected from participating teachers on instructional content forms that were keyed to the California Achievement Tests (CAT) at each grade level (see Appendix C for sample form). Table 13 indicates the average amount of instructional overlap per classroom at each school. In addition, the percent of classes in each expected achievement range is presented as well as an overall summary index which is an average of the classroom indices. Clearly, the

Table 13

Summary of Instructional Overlap (IO): New Jersey School District

Reading[a]

School	No. of Classes	% in Below Range	% in Expected Range	% in Above Range	Average IO (%)	IO Index[b]
A	10	0	0	100%	93	3
B	7	0	0	100%	89	3
C	11	0	0	100%	92	3
D	4	0	0	100%	92	3
E	11	0	0	100%	95	3
F	16	0	0	100%	92	3
G	7	0	0	100%	92	3
H	5	0	0	100%	87	3
I	(10)	-	-	-	(88)	-
Total	71	0	0	100%	92	3

Mathematics[a]

School	No. of Classes	% in Below Range	% in Expected Range	% in Above Range	Average IO (%)	IO Index[b]
A	10	0	30%	70%	93	3
B	6	0	33%	67%	92	3
C	11	0	45%	55%	93	3
D	7	0	43%	57%	83	3
E	8	0	13%	88%	91	3
F	13	0	31%	69%	92	3
G	3	0	0	100%	95	3
H	4	0	25%	75%	90	3
I	(11)	-	-	-	(91)	-
Total	62	0	31%	69%	91	3

[a] IO Index not appropriate for grades 7 and 8; averages for these grades not included in totals

[b] Index Key
1 = Below expected rate.
2 = At expected rate.
3 = Above expected rate.

results are extremely high, particularly in reading where overlap for all classes in the district was in the range where student achievement would be expected to exceed the normal rate of growth. Classroom level results for mathematics, although very high, were not quite as positive as those for reading. In summary, teachers indicated that coverage of content in their classes matched almost all basic skills objectives assessed by the CAT. From this, one would expect growth in student achievement to be very high.

Academic performance. Attending to academic performance requires systematic monitoring of students' success in daily work, mastery of skills, and review of content. Although teachers were introduced to the concept of academic performance in training sessions, this variable was not emphasized as strongly as SET or instructional overlap during the field test. Accurate data describing this variable were limited; teachers periodically described overall success and mastery rates for their classes on the principal/teacher conference forms. Teachers at approximately half of the schools reported success and mastery rates in the 80-100 percent range, with the remaining schools in the 50-79 percent range. Results were similar for reading and mathematics. In summary, the reported results indicate that students' success and mastery were relatively high across the district, although the quality of the data is poor. No data were collected on students' review of content.

Summary. In conclusion, the relatively high level of program implementation seemed to result in positive outcomes in terms of targeted

student behaviors and instructional processes. Based on these results, one would also expect students' achievement gains to exceed what might be predicted on the basis of national norms.

Student Achievement

Results from the district-wide testing program were used as the basis for examining student achievement in reading and mathematics. The California Achievement Tests (CAT) were administered to all students in every grade. Results are presented in Table 14 in terms of normal curve equivalents (NCEs) by school and grade, for tests administered in the spring of 1980, 1981, and 1982. The grade level scores are reported in a diagonal analysis keyed to the groups of students in particular grades in 1982 so that groups are relatively comparable across years. For example, scores in the row for grade three represent achievement of students in grade three in 1982, grade two in 1981, and in grade one in 1980. Thus, scores can be compared directly across rows to assess overall achievement gains. However, since scores for grades one and two were not available for all three years, they were not included in any school mean. Table 14 also shows NCE gains over the baseline year (80-81) as well as over the field test year (81-82).

According to the Title I norm-referenced evaluation model, students' achievement should progress at a rate consistent with that of students in the national norming sample. In other words, an NCE change of zero indicates that students' achievement growth rate equals the rate of the representative national sample. The findings show that improvement in both reading and mathematics was demonstrated in the New Jersey School District

Table 14

Student Achievement Scores[a]: New Jersey School District

READING

1982 GRADE LEVEL	School A					School B					School C				
	1980	1981	1982	+/− 80-81	+/− 81-82	1980	1981	1982	+/− 80-81	+/− 81-82	1980	1981	1982	+/− 80-81	+/− 81-82
1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2	–	54	57	–	+3	–	62	61	–	−1	–	47	50	–	+3
3	48	53	50	+5	−3	52	57	49	+5	−8	44	47	51	+3	+4
4	46	44	46	−2	+2	54	49	56	−5	+7	46	51	45	+5	−6
5	44	45	55	+1	+10	57	61	56	+4	−5	51	43	49	−8	+6
6	37	43	48	−6	+5	53	60	57	+7	−3	42	46	45	+4	−1
7	–	–	–	–	–	56	54	66	−2	+12	–	–	–	–	–
MEAN	44	46	50	+2	+4	54	56	57	+2	+1	46	47	48	+1	+1

MATHEMATICS

1982 GRADE LEVEL	School A					School B					School C				
	1980	1981	1982	+/− 80-81	+/− 81-82	1980	1981	1982	+/− 80-81	+/− 81-82	1980	1981	1982	+/− 80-81	+/− 81-82
1	–	–	–	–	–	–	–		–	–	–	–	–	..	–
2	–	57	62	–	+5	–	57	60	–	+3	–	53	62	–	+9
3	55	58	60	+3	+2	56	65	58	+9	−7	54	62	57	+8	−4
4	53	52	61	−1	+9	65	59	67	−6	+8	52	58	64	+6	+6
5	58	54	67	−4	+13	69	70	66	+1	−4	51	53	59	..	+6
6	49	57	61	+8	+4	64	71	77	+5	+6	56	56	53	0	−3
7	–	–	–	–	–	67	63	77	−5	+14	–	–	–	–	–
MEAN	54	55	62	+1	+7	64	66	69	+2	+3	53	57	58	+4	+1

[a] Scores represent results of California Achievement Tests as normal curve equivalents (NCEs) compared through a diagonal analysis as described in text. School means were computed from grades where data were available for all three years. School means, therefore, include scores from grades three through six for Schools A, C, and G, and scores from grades three through seven for Schools B, D, E, F, and H. Complete data for 1980 and 1981 for the middle school (School I) were unavailable because it received students from four elementary schools and records were dispersed and difficult to obtain. A mean for this school was not calculated due to the incompleteness of the data.

Table 14 (cont'd)

New Jersey School District

READING

1982 GRADE LEVEL	School D					School E					School F				
	1980	1981	1982	+ − 80-81	+ − 81-82	1980	1981	1982	+ − 80-81	+ − 81-82	1980	1981	1982	+ − 80-81	+ − 81-82
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	51	48	-	-3	-	53	41	-	-12	-	62	49	-	-13
3	49	53	51	+4	-2	51	53	51	+2	-2	54	41	40	-13	-1
4	47	45	51	-2	+6	48	47	46	-1	-1	44	38	46	-6	+8
5	42	44	48	+2	+4	47	39	40	-8	+1	45	41	47	-4	+6
6	49	47	46	-2	-1	45	40	45	-5	+5	44	40	38	-4	-2
7	52	42	49	-10	+7	41	40	39	-1	-1	36	39	43	+3	+4
MEAN	48	46	49	-2	+3	46	44	44	-2	0	45	40	43	-5	+3

MATHEMATICS

1982 GRADE LEVEL	School D					School E					School F				
	1980	1981	1982	+ − 80-81	+ − 81-82	1980	1981	1982	+ − 80-81	+ − 81-82	1980	1981	1982	+ − 80-81	+ − 81-82
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	53	62	-	+9	-	59	42	-	-17	-	64	55	-	-9
3	54	62	57	+8	-5	55	55	57	0	+2	61	48	49	-13	+1
4	52	58	64	+6	+6	50	54	53	+4	-1	48	46	54	-2	+8
5	51	53	59	+2	+6	52	44	49	-8	+5	56	48	58	-8	+10
6	56	56	53	0	-3	51	45	48	-6	+3	54	50	55	-4	+5
7	58	58	60	0	+2	47	55	48	+8	-7	48	55	56	+7	+1
MEAN	54	57	59	+3	+2	51	51	51	0	0	53	49	54	-4	+5

Table 14 (cont'd)

New Jersey School District

READING

1982 GRADE LEVEL	School G					School H					School I				
	1980	1981	1982	+ / − 80-81	+ / − 81-82	1980	1981	1982	+ / − 80-81	+ / − 81-82	1980	1981	1982	+ / − 80-81	+ / − 81-82
1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2	–	55	61	–	+6	–	54	57	–	+3	–	–	–	–	–
3	49	42	64	-7	+22	58	50	51	-8	+1	–	–	–	–	–
4	43	47	58	+4	+11	51	54	50	+3	-4	–	–	–	–	–
5	47	41	44	-6	+3	52	54	59	+2	+5	–	–	–	–	–
6	48	46	53	-2	+7	51	60	58	+9	-2	–	–	–	–	–
7	–	–	–	–	–	52	56	56	+4	0	–	–	48	–	–
8	–	–	–	–	–	–	–	–	–	–	–	39	42	–	+3
MEAN	47	44	55	-3	+11	53	55	55	+2	0					

MATHEMATICS

1982 GRADE LEVEL	School G					School H					School I				
	1980	1981	1982	+ / − 80-81	+ / − 81-82	1980	1981	1982	+ / − 80-81	+ / − 81-82	1980	1981	1982	+ / − 80-81	+ / − 81-82
1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2	–	56	70	–	+14	–	52	55	–	+3	–	–	–	–	–
3	50	45	65	-5	+20	56	48	59	-8	+11	–	–	–	–	–
4	45	54	61	+9	+7	51	62	59	+11	-3	–	–	–	–	–
5	56	47	52	-9	+5	57	58	59	+1	+1	–	–	–	–	–
6	50	56	65	+6	+9	55	61	63	+5	+2	–	–	–	–	–
7	–	–	–	–	–	52	64	67	+12	+3	–	–	53	–	–
8	–	–	–	–	–	–	–	–	–	–	–	44	46	–	+2
MEAN	50	51	61	+1	+10	54	59	61	+5	+2					

during the field test year. In general, gains were slightly higher in mathematics than in reading. At the school level, overall gains were highest at schools A, F, and G. At these schools, total increases ranged from three to 11 NCE points in reading and from five to 10 NCE points in mathematics. No school registered a decline in achievement during the field test year. Even in the "worst" cases, student achievement improved at a pace similar to that of the national norm group (NCE gain of zero): Schools E and H in reading and School E in mathematics. In other words, achievement at all schools progressed at a rate equal to or exceeding what would have been expected relative to national norms. Educationally significant gains of five or more NCE points[5] were made at one school in reading (School G) and at three schools in mathematics (Schools A, F, and G).

In reading, of the 46 grade level score changes for the field test year, there were 26 gains ranging from one to 22 NCE points; 19 losses, ranging from one to 13 NCE points; and one case of no NCE gain. Fifteen of the 26 gains were educationally significant, while only five of the 19 losses were educationally significant. In mathematics, there were 35 gains, ranging from one to 20 NCE points; and 11 losses, ranging from one to 17 NCE points. Twenty-two of the 35 gains were educationally significant, while only five of the 11 losses were educationally significant. With the exception of School I, the middle school, at least one grade

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[5] See chapter on Field Test Evaluation Procedures for discussion of rationale for rule of thumb considering educational significance.

level at each school made an educationally significant gain in reading and/or mathematics.

From 1980 to 1981, of the eight schools for which data were available, in reading four schools demonstrated overall gains, from one to two NCE points, and four schools registered overall losses, from two to five NCE points. Three of the four schools that made gains in reading over 1980-81 also made gains over 1981-82. The fourth school maintained its overall growth pattern (i.e., an NCE gain of zero). Three of the four schools that registered losses from 1980 to 1981 in reading made gains from 1981 to 1982; the fourth school maintained its overall pattern (i.e., a NCE gain of zero).

From 1980 to 1981, in mathematics six schools registered overall gains from one to five NCE points, one school registered an overall loss of four NCE points, and one school had no NCE gain. All six schools that made overall gains over 1980-81 also made gains over 1981-82; the school with a loss from 1980 to 1981 made a substantial gain; and the school with no NCE gain between 1980 and 1981 continued its overall pattern between 1981 and 1982. Some of the changes were dramatic. For example, at School G, the school total score for reading changed from -3 NCE points over 1980-81 to +11 NCE points over 1981-82, and the total mathematics score changed from +1 to +10 NCE points. In addition, the mathematics score at School F changed from -4 to +5 NCE points.

Results on the state-wide basic skills proficiency test corroborate the gains and high levels of achievement demonstrated on the CAT. As Table 15 indicates, a higher percentage of students in both elementary grade levels tested met statewide standards in 1982 than in 1981 in

Table 15

Student Achievement Relative to State Standards, New Jersey School District

Percent of Students
Meeting State Standards on Minimal Basic Skills Test

School	Grade	Math			Reading		
		1981	1982	Change	1981	1982	Change
A	3	71.7	86.5	14.8	78.3	94.6	16.3
	6	59.0	100.0	41.0	68.4	96.4	28.0
B	3	73.9	76.5	2.6	95.7	94.1	-1.6
	6	85.7	100.0	14.3	82.1	100.0	17.9
C	3	59.1	100.0	40.9	86.4	100.0	13.6
	6	78.8	76.9	-1.9	79.2	88.5	9.3
D	3	86.8	97.3	10.5	100.0	97.3	-2.7
	6	74.2	95.1	20.9	77.4	85.4	8.0
E	3	78.1	92.3	18.1	75.0	96.2	21.1
	6	85.2	85.7	0.5	77.8	91.4	13.6
F	3	67.7	92.3	24.6	73.8	92.3	18.5
	6	80.3	100.0	19.7	75.4	81.8	6.4
G	3	87.5	100.0	12.5	90.6	100.0	9.4
	6	92.3	95.2	2.9	92.3	95.2	2.9
H	3	85.7	84.6	-1.1	92.9	100.0	7.1
	6	100.0	100.0	0.0	100.0	93.3	-6.7
I	3	74.1	92.9	18.8	84.4	96.0	11.6
	6	79.7	92.6	12.4	79.4	89.6	10.2

virtually all schools. Improvements were evident in both reading and mathematics. At the end of the field test, almost all third and sixth grade students in the district met the standards. District level totals ranged from 90 to 96 percent. These represented improvements ranging from 10 to 19 percent, despite nearing the ceiling for the groups.

In summary, student achievement results in both reading and mathematics are impressive. Students at all schools progressed at rates at least consistent with achievement expectations based on the national norm group, and at many schools, gains exceeded achievement expectations. In most cases, these gains reversed trends exhibited during the baseline year. At the end of the 1981-82 year, achievement in most field test schools was around the national average in reading, and significantly higher than the national average in mathematics. Likewise, performance relative to statewide basic skills standards improved, with almost all students in the district meeting state standards appropriate for their grade level.

Relationship of Classroom Process Variables to Student Achievement

Achievement Directed Leadership is based on research that suggests strong relationships between several classroom process variables and student achievement gains. Therefore, it was expected that student achievement would be directly related to the degree to which teachers actually attended to these variables in their classrooms. To test the relationship between classroom process variables and student achievement gains, indices were constructed as outlined in the field test methodology chapter, and chi-square analyses of available SET, instructional overlap,

and student achievement data from the New Jersey School District were performed. Due to the lack of variability in the classroom process data (i.e., almost all scores were in the extreme high end of the range), no relationship was evident. However, this does not refute the research base, since variability must exist for correlations to be established.

Relationship of Level of Program Implementation to Student Achievement

This subsection examines the relationship between level of program implementation and student achievement gains in the New Jersey School District. Table 11 on page 73 summarized the level of program implementation for each of the field test schools. Table 16 shows how these implemention summary indices are related to student achievement gains. The results are graphically illustrated in Figures 5 and 6 for reading and mathematics, respectively. Since no school mean for student achievement was calculated for School I, data for that school are not included in Table 16, or in Figures 5 or 6. The findings demonstrate relational trends between level of program implementation and student achievement. The two schools (Schools A and G) with a high degree of program implementation exhibited the largest increases in achievement in reading and mathematics over the course of the field test. In addition, their gains from 1981 to 1982 were in contrast to their gains over the baseline year (1980 to 1981). On the other hand, the three schools (Schools B, C, and H) with a low degree of implementation exhibited little change during the field test year and this change was basically consistent with the change over the

Table 16

Summary of Relationship Between Level of Program Implementation and Student Achievement Gains: New Jersey School District

		READING					MATHEMATICS				
School	Summary of School Implementation	1980	1981	1982	+/- 80-81	+/- 81-82	1980	1981	1982	+/- 80-81	+/- 81-82
A	High	44	46	50	+2	+4	54	55	62	+1	+7
B	Low	54	56	57	+2	+1	64	66	69	+2	+3
C	Low	46	47	48	+1	+1	53	57	58	+4	+1
D	Medium	48	46	49	-2	+3	54	57	59	+3	+2
E	Medium	46	44	44	-2	0	51	51	51	0	0
F	Medium	45	40	43	-5	+3	53	49	54	-4	+5
G	High	47	44	55	-3	+11	50	51	61	+1	+10
H	Low	53	55	55	+2	0	54	59	61	+5	+2
MEAN		48	47	50	-1	+2	54	56	59	+2	+4

Note: Test used is the California Achievement Test: Scores are reported as NCEs.

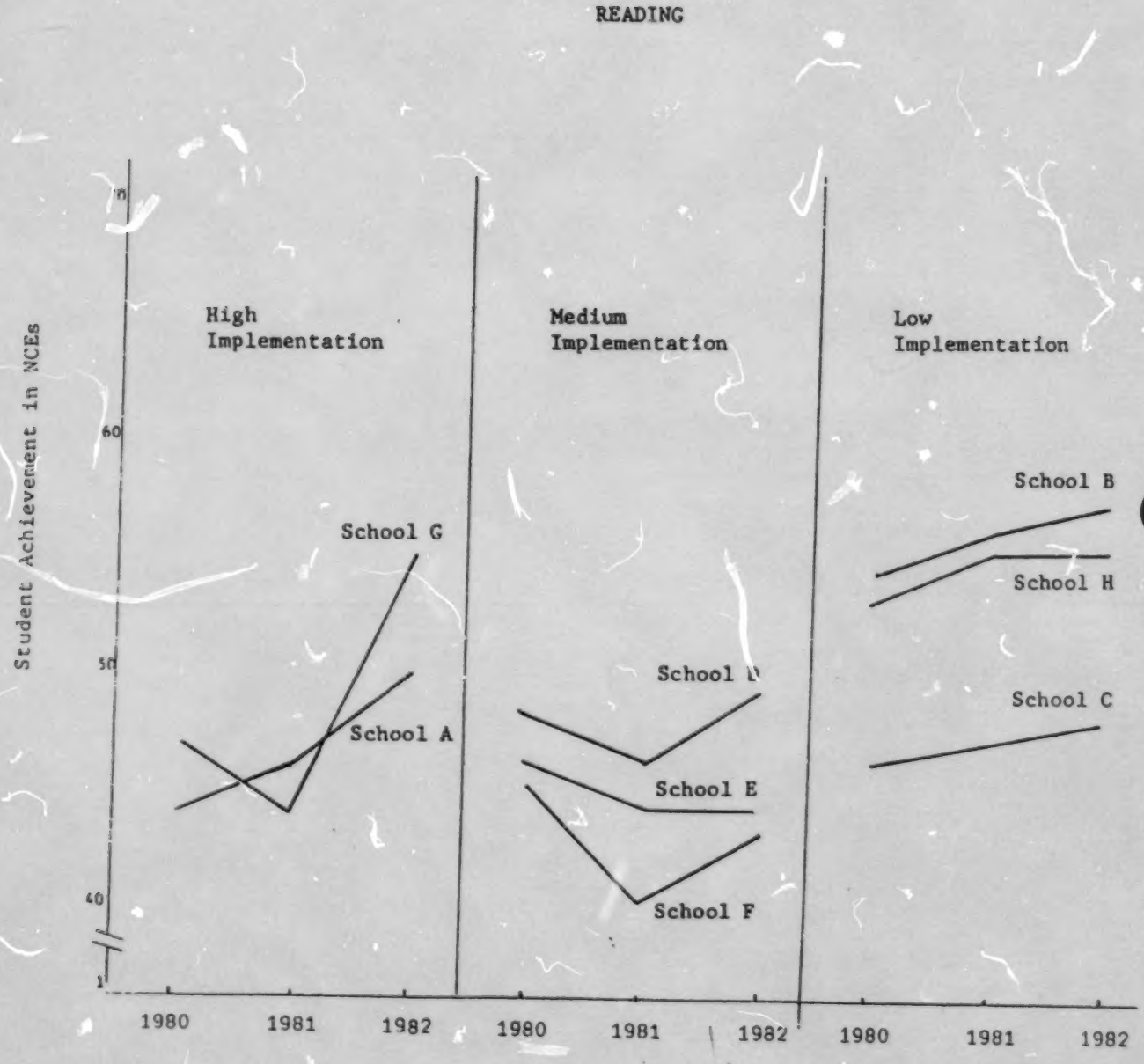

Figure 5. Relationship of implementation to achievement gains in reading by school: New Jersey School District.

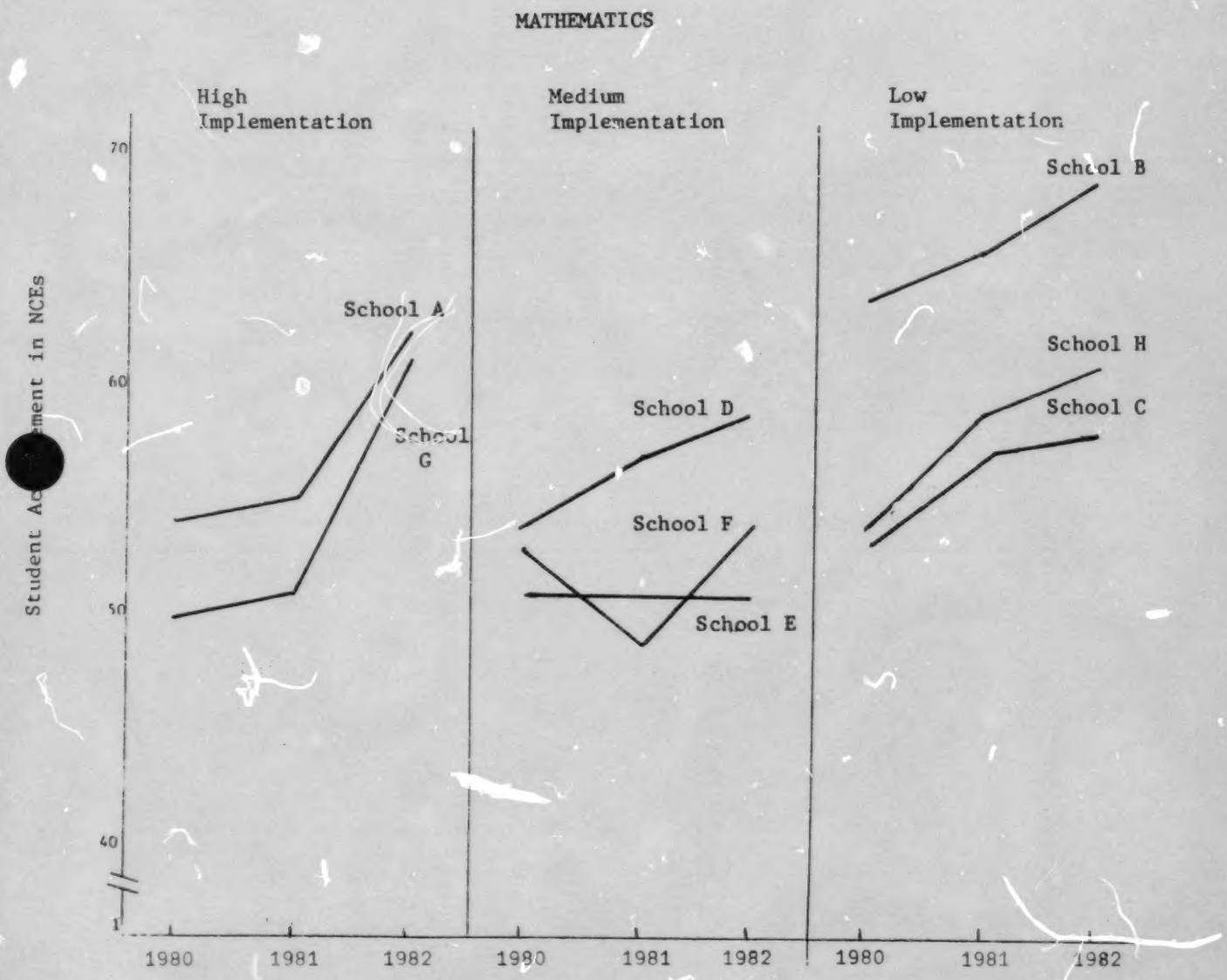

Figure 6. Relationship of implementation to achievement gains in mathematics by school: New Jersey School District.

baseline year. The three schools (Schools D, E, and F) with medium levels of implementation exhibited varying achievement gains during the field test year and in comparison to the baseline year. In some cases, their gains (e.g., School F for mathematics) approached those of the high implementation schools while in other cases their gains (e.g., School E for reading and mathematics) were similar to low implementation schools.

In summary, a relationship between level of program implementation and student achievement in reading and mathematics was demonstrated. Although all schools implemented the program to some degree and all exhibited improvement at least consistent with expectations, achievement gains were most positive for those schools with the highest levels of implementation. Although the field test evaluation design was non-experimental, this relationship lends considerable support to the hypothesis that Achievement Directed Leadership has a considerable positive impact upon student achievement.

Overall Summary of New Jersey Field Test Findings

This chapter has described Achievement Directed Leadership field test findings in the New Jersey School District in terms of implementation activities and outcomes at five levels: BSC, district, principal, teacher, and student. The district's eight elementary schools and one middle school participated in the field test. The New Jersey School District was selected as the site for the field test because of its plans for comprehensive implementation.

Orientation and initial training of central office staff and principals were regarded as successful. Training was well received and

adminstrators were confident that they had acquired the necessary knowledge and skills to implement all components of the program. However, BSC observers reported that levels of principal commitment and understanding of key concepts varied somewhat, implying that teacher training and program implementation would vary in quality among schools.

The district superintendent and assistant superintendent provided key leadership in setting district-wide policies for school improvement and took an active role in planning and implementing the program. Other central office staff were also actively involved as they assumed new roles as instructional leaders. All central office staff were very committed to the improvement approach and provided the support necessary for its success. All district level planning and participatory supervision activities were effectively carried out. Although the BSC initially provided considerable assistance in planning and training, the superintendent, assistant superintendent, and other central office staff gradually assumed major responsibilities for these roles.

Program implementation at the principal level generally proceeded according to district plans although some variation among schools was observed. Principals systematically planned for implementation, in most cases trained teachers with respect to the time and content variables, and participated with teachers in supervisory activities. However, actual degree of implementation ranged from low (at three schools) to high (at one school). These variations are probably due, in large part, to the differing levels of commitment and understanding noted by BSC observers.

Overall, teachers' activities sufficiently followed the designated implementation model when considered on a district-wide basis. For

example, they used research to guide instructional improvement, and attended to targeted classroom variables. They also reported that they were generally successful in implementing the program components in their classrooms. However, as with principals, levels of commitment and implementation seemed to vary widely across schools. Actual degree of teacher implementation ranged from low (at three schools) to high (at two schools). Considering the joint effects of principal and teacher implementation, schools were categorized as relatively high (2 schools), medium (4 schools), or low (3 schools) in terms of overall levels of implementation of the improvement approach.

The moderate level of program implementation district-wide seemed to result in positive outcomes in terms of targeted student behaviors. Instructional overlap between actual classroom instruction and learning objectives corresponding to standardized achievement test items was uniformly high throughout schools in the district. Likewise, teachers at most schools met their targeted goals for maintaining high levels of student engaged time. Although measures of other important classroom process variables were not available, conditions were exhibited that would indicate high expectations regarding student achievement gains.

Student achievement results in both reading and mathematics were impressive. Students at all schools progressed at rates at least consistent with achievement expectations based on the national norm group, and at many schools, gains exceeded achievement expectations. In most cases these gains reversed trends exhibited during the baseline year. District-wide achievement, at the end of the field test, was around the national average in reading and significantly exceeded the national

average in mathematics. Likewise, most students in the district met statewide minimum basic skills standards.

A relationship between level of program implementation and student achievement in reading and mathematics was observed. Achievement gains were most positive for those schools with the highest levels of implementation and least positive (although not negative) for schools with lowest levels of implementation. These relationships lend considerable support to the hypothesis that Achievement Directed Leadership has a significant, positive impact on student achievement.

References

Anderson, L. W. Instruction and time-on-task: A review. Journal of Curriculum Studies, 1981, 13(4), 289-303.

Berman, P., & McLaughlin, M. W. Federal programs supporting educational change: The findings in review (Vol. IV). Santa Monica, Calif.: Rand Corporation, 1975.

Block, J. H., & Burns, R. B. Mastery learning. In L. S. Shulman (Ed.), Review of research in education (Vol. 4). Itasca, Ill.: F. E. Peacock Publishers, Inc., 1977.

Bloom, B. S. Human characteristics and school learning. New York, N.Y.: McGraw-Hill, Inc., 1976.

Brady, M. E., Clinton, C., Sweeney, J. M., Peterson, M., & Poynor, H. Study Findings: Final report of the instructional dimensions study, 1976-1977. Washington, D.C.: Kirschner Associates, Inc., 1977.

Brophy, J. E., & Good, T. L. Teacher-student relationships: Causes and consequences. New York, N.Y.: Holt, Rinehart and Winston, Inc., 1974.

Campbell, D. T., & Stanley, J. C. Experimental and quasi-experimental designs for research. Chicago, Ill.: Rand McNally, 1966.

Carroll, J. B. A model of school learning. Teachers College Record, 1963, 64, 723-733.

Cooley, W., & Leinhardt, G. The Instructional Dimensions Study. Educational Evaluation and Policy Analysis, 1980, 2, 7-25.

Crawford, J. Interactions of learner characteristics with the difficulty level of the instruction. Journal of Educational Psychology, 1978, 70(4), 523-553.

Dermaline, R., & Rader, D. Model A Owner's Manual. Portland, Ore.: Northwest Regional Educational Lab., 1981. (ERIC Document Reproduction Service No. ED 209 324)

Dunkin, M. J., & Biddle, B. J. The study of teaching. New York, N.Y.: Holt, Rinehart and Winston, Inc. 1974.

Echternach, G. The use of different models in the ESEA Title I Evaluation System. Paper presented at the annual meeting of the American Educational Research Association/National Council on Measurement in Education, Toronto, 1978.

English, W. Curriculum mapping. Educational Leadership, 1980, 37(7), 558-559.

Financial assistance to the local educational agencies to meet the specific educational needs of educationally deprived and neglected and delinquent children. Subpart F - Evaluation, U.S. Federal Register, 1979, 44(199), 59153.

Fisher, C. W., Filby, N. N., Marliave, R., Cahen, L. S., Dishaw, M. M., Moore, J. E., & Berliner, D.C. Teaching behaviors, academic learning time and student achievement: Final report of Phase III-B, Beginning Teacher Evaluation Study in Beginning Teacher Evaluation Study Technical Report Series (Tech. Rep. V-1). San Francisco, Calif.: Far West Laboratory for Educational Research and Development, 1978.

Fisher, C., Marliave, R., & Filby, N. Improving teaching by increasing "academic learning time." Educational Leadership, 1979, 37(1), 52-54.

Horst, D. P., Tallmadge, G. K., & Wood, C. T. A practical guide to measuring project impact on student achievement. Monographs on evaluation in Education, Number 1. Washington, D.C.: U.S. Government Printing Office, 1975.

Koehler, V. Effective schools research and teacher change. Paper presented at the annual meeting of the American Educational Research Association, Los Angles, 1981.

Lipe, D., & Haveman, J. E. Toward more natural field testing of classroom materials. Palo Alto, Calif.: American Institute for Research in Behaviorial Sciences, 1977. (ERIC Document Reproduction Service No. ED 157 943)

Maye, R. A handbook of monitoring and technical assistance aids program evaluation. Evanston, Ill.: Educational Testing Service, 1981. (ERIC Document Reproduction Service No. ED 211 591)

Medley, D. M. Teacher competence and teacher effectiveness: A review of process-product research. Washington, D.C.: American Association of Colleges for Teacher Education, 1977.

Ozenne, D. The effect of vertical scaling impression in the estimation of Title I project gains. Paper presented at the annual meeting of the American Educational Research Association/National Council on Measurement in Education, Toronto, 1978.

Pincus, J., & Williams, R. C. Planned change in urban school districts. Phi Delta Kappan, 1979, 60(10), 729-733.

Rosenshine, B. Content, time, and direct instruction. In P. L. Peterson, & H. J. Walberg (Eds.), Research on Teaching. Berkeley, Calif.: McCutchen Publishing Corp., 1979.

Rosenshine, B. & Furst, N. The use of direct observation to study teaching. In R. M. W. Travers (Ed.), Second handbook on research on teaching. Chicago, Ill.: Rand McNally & Co., 1973.

Scriven, M. The methodology of evaluation. In B. R. Worthen & J. R. Sanders (Eds.), Educational evaluation: Theory and practice. Belmont, Calif.: Wadsworth Publishing, 1973.

Stallings, J. A., & Kaskowitz, D. Follow Through classroom observation evaluation, 1972-1973. Menlo Park, Calif.: Stanford Research Institute, 1974.

Tallmadge, G. K. Interpreting NCEs: ESEA Title I evaluation and reporting system. Technical paper No. 2. Mountain View, Calif: RMC Research Corporation, 1976.

Tallmadge, G. K., & Wood, C. T. User's guide--ESEA Title I evaluation and reporting system. Mountain View, Calif.: RMC Research Corporation, 1980.

Appendix A:

Pennsylvania Analysis

PENNSYLVANIA ANALYSIS

The 1981-82 field test of the effectiveness of the Achievement Directed Leadership program was conducted by the Basic Skills Component (BSC) of Research for Better Schools, Inc., in three school districts located in New Jersey, Pennsylvania, and Delaware. The New Jersey District was the focus of the field test since the program was fully implemented in this district during the time of the field test.

The field test in Pennsylvania and Delaware consisted of supplementary analyses to examine additional questions about the effectiveness of Achievement Directed Leadership. The focus of interest in the Pennsylvania District was the effectiveness of the program when only part of the total approach is implemented in a school district. The major interest in the Delaware District was the continuing effects of program participation on student achievement over a number of years.

This discussion of the Pennsylvania analysis is in five sections. First, the purpose of the analysis is outlined. Second, an overview of the school district and the participating schools is presented. Third, the nature and extent of program implementation are described. Fourth, student achievement results are displayed and discussed. Fifth, conclusions concerning partial implementation are presented.

Purpose of the Analysis

During the summer of 1981, the BSC and the Pennsylvania District discussed the possibility of the district's involvement in the 1981-82 field test of Achievement Directed Leadership. The district, which had no

prior involvement with the program, expressed interest in a partial implementation. The BSC viewed the district's interest as an opportunity to test whether partial implementation of Achievement Directed Leadership would influence student achievement, and decided to include the district in the field test for that reason. Thus, analysis of the Pennsylvania District's involvement focused on determining whether partial implementation of the program would affect student achievement.

District and School Overview

The Pennsylvania District has 12,700 students from an industrial city and its surrounding boroughs. It is the fifth largest school district in the state. It has 17 elementary schools, five junior high schools, and two senior high schools. The district's minority population, about 12 percent of the total student population, is predominantly Hispanic.

Table 1 presents some descriptive characteristics of the five elementary schools that participated in the field test. All of them are K-6 schools, and there is little variation among them in the other characteristics listed, although School E is a smaller school with a lower average daily enrollment and Schools B and D have a higher average class size.

Nature and Extent of Program Implementation

In August of 1981, the BSC conducted an orientation of Achievement Directed Leadership for some central office staff and elementary principals in the Pennsylvania District. After the orientation, it was decided that the district's implementation would consist of the following: (1) the BSC would train principals of five of the 17 elementary schools

Table 1

Description of Field Test Schools: Pennsylvania District

Characteristics	Schools				
	A	B	C	D	E
Grades in School	K - 6	K - 6	K - 6	K - 6	K - 6
Average Daily Enrollment	295	262	331	286	165
Average Daily Attendance Rate	95%	91%	92%	90%	93%
Number of Teachers	10	8	13	9	6
Average Class Size	26	31	25	32	25
Average Years Experience of Teachers	over 10	over 10	over 10	over 10	10

and some central office staff in the improvement approach and in the management of the time and content variables; (2) these principals, with BSC and central office support and assistance, would train and work with teachers in the use of the improvement approach and the management of the time and content variables; and (3) the BSC would work with central office staff in leading and supporting the work in the schools.

In August, the BSC conducted a five-hour introductory training session on content management. Two of the five principals and some central office staff attended this session. Because the district lacked prerequisites for implementation of content management (i.e., prior learning data, and a standard curriculum or common texts for both reading/language arts and mathematics), teacher training in content management was to be limited in scope and postponed until necessary materials became available. The BSC provided further training to principals in content management during monthly leadership seminars.

In September, the BSC conducted a time management workshop. Twelve hours, spanning three days, were devoted to this workshop. The five principals and central office staff assuming major roles in program implementation attended all three days.

After the time training workshop, the five principals oriented and trained teachers in their respective schools in the improvement approach and in the management of the time variables. Most of the formal time training of teachers by principals was conducted during faculty meetings. This time training was completed by November.

In regard to content management training, as needed material became available, it was provided to principals who in turn informed teachers and

monitored their use of these materials. For mathematics, the content forms matching test items with curriculum were completed by the BSC by December. However, similar forms for reading were not completed until April. The principals in Schools A and E conducted the earliest and most intense work with teachers in the management of the content variables for mathematics. The other principals did varying amounts of informal work with teachers on an individual basis in regard to mathematics content training. Limited training was provided to teachers in the content variables for reading during the time of the field test.

After they had trained their teachers in the time variables, the five principals monitored teacher performance of program functions and engaged in ongoing communication with teachers primarily through structured classroom observations and principal/teacher conferences. Most teachers reported that principals observed their classes approximately seven times and conducted an average of three conferences. Both principals and teachers reported that teachers used the improvement approach in their classrooms.

In addition to training, the BSC provided ongoing support and technical assistance to central office staff and the five principals. At least once a month, the BSC conducted leadership seminars for the involved central office staff and the five principals. These seminars dealt with training needs, implementation problems, and planning issues. The BSC also provided follow-up technical assistance through periodic meetings with central office staff and with individual principals who requested assistance.

The superintendent of the Pennsylvania District conducted one formal conference with each of the five principals involved in the program. These conferences provided an opportunity for the superintendent and principals to discuss any program concerns and to review plans and activities for instructional improvement.

In summary, partial implementation of Achievement Directed Leadership in the Pennsylvania District basically entailed the following:

1. The BSC oriented and trained five principals and some central office staff in the improvement approach and the management of the time and content variables.

2. The five principals, with BSC support and some assistance by the central office staff, oriented, formally trained, and worked with their respective teachers in regard to the improvement approach and the management of the time variables.

3. All of the principals formally or informally trained and worked with their respective teachers, although to varying degrees, in regard to the management of the content variables for mathematics. Work done by principals in the management of the content variables for reading was limited in scope and accomplished late in the school year.

Student Achievement Results

Results from the district's testing program were used as the basis for examining student achievement in reading and mathematics. In the Pennsylvania District, the Science Resarch Associates (SRA) achievement test series is administered to all students in every grade each spring. SRA test results are summarized in Table 2 in terms of normal curve equivalents (NCEs) by school and grade, for tests administered in 1981, and 1982. The grade level scores are reported in a diagonal analysis keyed to the groups of students in specified grades in 1982 so that groups are relatively comparable across years. For example, a score in the row

Table 2

Student Achievement Scores[a]: Pennsylvania District

Reading

Grade 81-82	School A 1981	School A 1982	School A +/- 81-82	School B 1981	School B 1982	School B +/- 81-82	School C 1981	School C 1982	School C +/- 81-82	School D 1981	School D 1982	School D +/- 81-82	School E 1981	School E 1982	School E +/- 81-82
1	-	76	-	-	64	-	-	48	-	-	59	-	-	47	-
2	72	80	+8	64	59	-5	56	64	+8	67	62	-5	47	50	+3
3	64	64	0	51	52	+1	62	58	-4	60	60	0	44	43	-1
4	58	63	+5	53	58	-1	53	57	+4	55	54	-1	49	44	-5
5	59	61	+2	46	53	+7	48	52	+4	62	66	+4	34	49	+15
6	57	66	+9	58	55	-3	61	57	-4	68	66	-2	42	49	+7
MEAN	60	64	+4	54	55	+1	56	56	0	61	62	+1	42	46	+4

Mathematics

Grade 81-82	School A 1981	School A 1982	School A +/- 81-82	School B 1981	School B 1982	School B +/- 81-82	School C 1981	School C 1982	School C +/- 81-82	School D 1981	School D 1982	School D +/- 81-82	School E 1981	School E 1982	School E +/- 81-82
1	-	79	-	-	75	-	-	48	-	-	65	-	-	66	-
2	63	81	+18	72	66	-6	48	68	+20	68	60	-8	46	52	+6
3	63	69	+6	60	59	-1	55	57	-3	66	69	+3	40	41	+1
4	70	75	+5	59	56	-3	49	54	+5	60	66	+6	41	56	+15
5	66	71	+5	47	59	+12	42	50	+8	70	75	+5	45	50	+5
6	72	82	+10	50	59	+9	57	58	+1	73	73	0	49	55	+6
MEAN	68	74	+6	54	58	+4	51	54	+3	67	71	+4	44	51	+7

Scores represent results of Science Research Associates (SRA) Achievement tests as normal curve equivalents (NCEs) compared through a diagonal analysis as described in text. Total scores were computed from grades where data were available for all three years. School means, therefore, include scores from grades two through six for all schools.

for grade three represents achievement of students in grade three in 1982 and in grade two in 1981. Thus, scores can be compared directly across rows to assess overall achievement gains. These test scores are graphically described in Figure 1.

A basic assumption of the Title I Norm-referenced Model is that student achievement progresses at a rate consistent with that of students in the national norm group if no special treatment is introduced. In other words, an NCE gain of zero indicates that students' gain in achievement equals that of the representative national sample. Although many "rules of thumb" have been used to determine the educational significance of achievement test score gains, for the purpose of this report a change of five NCEs was determined to be educationally significant based on a statistical examination of the differences between grade level means.

The following discussion refers to gains/losses during 1981-82, the field test year, for five grade levels, grades two through six. Grade one is not included in the analysis because its 1981 achievement scores are not available.

At the school level, the results in reading show that four schools registered gains ranging from one to four NCE points and one school registered a zero NCE gain. In mathematics, all five schools registered gains ranging from three to seven NCE points. In Schools A and E, the mathematics gains reached the level of educational significance (i.e., five or more NCE points).

Considering each of the five grade levels in each of the five schools, in reading there were 13 gains, ranging from one to 15 NCE

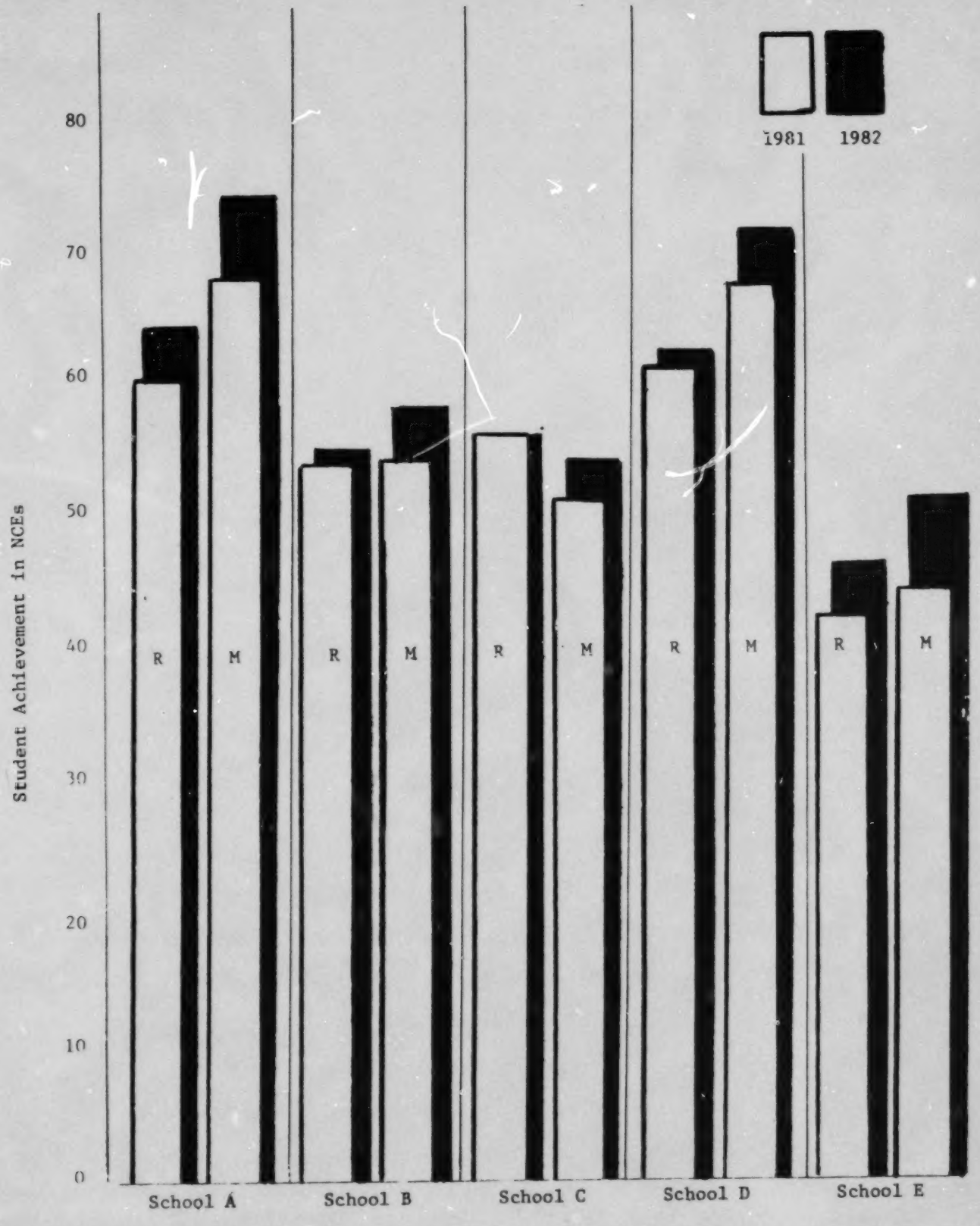

Figure 1. SRA reading (R) and math (M) scores as NCEs for 1981 and 1982, for the five field test schools in the Pennsylvania District.

points; ten losses, ranging from one to five NCE points; and two cases of zero NCE gains. In mathematics there were 19 increases, ranging from one to 20 NCE points; five decreases, ranging from one to eight NCE points; and one case of zero NCE gain. In terms of the educational significance of these grade level changes, in reading there were seven cases of educationally significant gains and three cases of educationally significant losses. In mathematics, there were 16 cases of educationally significant gains and two cases of educationally significant losses.

In summary, during the field test year there were increases in reading and mathematics achievement at both overall school and individual grade levels. These achievement increases were greater and more frequent in mathematics than in reading. Schoolwide, the two educationally significant gains were for mathematics, at Schools A and E. When considering all 25 grade levels (i.e., grades two through six) sixteen demonstrated educationally signficant gains for mathematics and seven demonstrated educationally significant gains for reading.

Conclusions

In the partial implementation of Achievement Directed Leadership by the Pennsylvania District, five elementary school principals were trained by the BSC in the improvement approach and in the management of the time and content variables. After time training, these five principals oriented, trained, and worked with their respective teachers in regard to the improvement approach and the time variables. After being provided with prerequisite materials, these principals conducted some training and

worked with teachers in regard to the management of the content variables for mathematics, and to a much lesser extent for reading.

Student achievement findings from the five participating schools suggest that the partial implementation of Achievement Directed Leadership in this district did positively influence student achievement in reading and mathematics. Moreover, student achievement gains for mathematics, an area that received greater program attention, were higher than those for reading.

Appendix B:

Delaware Analysis

DELAWARE ANALYSIS

The 1981-82 field test of the effectiveness of the Achievement Directed Leadership program was conducted by Research for Better Schools, Inc., in three school districts located in New Jersey, Pennsylvania, and Delaware. The New Jersey School District was the focus of the field test since Achievement Directed Leadership was fully implemented in the district's nine elementary schools and one middle school during the time period scheduled for the field test.

Two supplementary analyses were conducted in Pennsylvania and Delaware to examine additional questions about the improvement program. The focus of interest in the Pennsylvania analysis was the effects of Achievement Directed Leadership when only part of the program is implemented in a school district. The major interest in the Delaware analysis was the effect of multi-year program participation on student achievement.

This appendix discusses the Delaware analysis in five sections. First, the purpose of the analysis is outlined. Second, an overview of the district and field test schools is given. Third, the nature and extent of implementation of the program in the district are described. Fourth, student achievement results for this school district during the period of program implementation are shown. Fifth, the possible effects of continued program participation on student achievement are discussed.

Purpose of the Analysis

A field test of Achievement Directed Leadership was scheduled for the 1981-82 school year. Three school districts in different states agreed to participate in the field test. The extent of prior participation in the

program and the level of planned involvement during the field test year were important factors that influenced the nature of the field test in each district.

In Delaware, the cooperating school district had participated in the program for three years, and planned to maintain a similar level of involvement during the field test year. Thus, student achievement data would be available for four years of participation in the program in this district. These data would provide an opportunity to examine the effects of program participation on student achievement over a period of time.

The field test in this school district was designed to: (1) collect data on program implementation and student achievement during the field test year; (2) combine these data with data collected on program implementation and student achievement in the previous three years; and (3) analyze the changes in student achievement over time in relationship to program implementation.

District and School Overview

The cooperating Delaware site is a small rural district serving a population with low socioeconomic status. It has 2,136 students in one kindergarten school, two elementary schools, one middle school, and one high school. Minority group students make up about 20 percent of the student population. Table 1 provides an overview of the major characteristics of the two elementary schools (Schools A and B) which participated in the program. As the table indicates, both schools contain grades 1-5, but School A is a much larger school than School B and has more teachers. The teachers in School B, however, have more teaching experience.

Table 1

Description of Field Test Schools: Delaware School District

Characteristics	School A	School B
Grades in School	1 - 5	1 - 5
Average Daily Enrollment	510	280
Average Daily Attendance Rate	90%	94%
Number of Classroom Teachers	27	13
Average Class Size	25	25
Average Years Experience of Teachers	5	11

Nature and Extent of Program Implementation

As mentioned earlier, the Delaware School District had a three-year history of cooperative development of the improvement approach prior to the field test in the 1981-82 school year. This cooperative development involved principals and teachers from all five schools, but participation was greatest at the two elementary schools, especially School B. Table 2 summarizes the involvement of the central office and these two elementary schools over a four-year time period during the development and field test of the approach. Some training was delivered every year in order to accommodate new participants, reinforce previous training for experienced program participants, and train all who would be involved in new portions of the program as they were developed. In addition, the superintendent and his staff gave continued support to the concepts of the program throughout this period and they facilitated related activities when opportunities arose.

During the second half of the first year of involvement, administrators and some teachers at Schools A and B implemented the time management portion of the improvement approach. In January of 1979, some teachers at both elementary schools were oriented to the approach and trained in the management of students' use of classroom time. Observations were subsequently carried out by administrators at both schools. At both schools, teachers met with their observers and RBS consultants to discuss the observation process and subsequent use of data for improvement purposes. In these meetings, they compared the observation data to research findings, identified opportunities for improvement, selected improvement

Table 2

Implementation of Achievement Directed Leadership
in the Delaware School District
1978 - 82

Level	1978 - 79	1979 - 80	1980 - 81	1981 - 82
Central Office	Orientation Planning Time training and implementation	Planning	Planning Content training and implementation	Planning Time and content training and implementation
School	Orientation Planning Time training and implementation (Schools A and B)	Orientation Planning Time training and implementation (School B)	Planning Time implementation (School B) Content training and implementation (reading, Schools A and B)	Planning Time and content training and implementation (reading and mathematics, Schools A and B)

strategies, and planned for implementation of these strategies. Teachers then implemented the strategies in their classrooms. These meetings also provided useful suggestions to RBS for developmental revisions of the program.

During the summer of 1979 it was decided that RBS would work primarily with the staff of School B in time management during the 1979-80 school year. In the fall of 1979, the principal of School B and RBS staff reviewed the approach with all basic skills teachers and then trained seven of these teachers as observers for time management. These teachers observed each other's classrooms early in the fall, and met with their principal and each other in planning conferences. Teachers then implemented improvement strategies. The principal observed these classrooms later in the school year to assess the effectiveness of the improvement strategies and held a second round of conferences with teachers for review and planning purposes.

Plans for 1980-81 included continued implementation of the time management component of the program at School B, and implementation of the content management materials in reading at both School A and School B. Consequently, reading teachers at both schools were trained by central office staff in the management of content variables, especially prior learning. While central office staff and principals monitored students' coverage of the curriculum throughout the school year, teachers at both schools attempted to remediate student prior learning deficiencies. In addition, two rounds of time management observations, and two rounds of conferences were held at School B.

School year 1981-82 was the year of the field test. Both schools agreed to utilize the time and content management materials in reading and mathematics. Accordingly, central office staff and administrators from the two schools received review training in the overall approach and in time and content management. These sessions were led by BSC staff during the summer and early fall of 1981. Teachers participated in the content training session, but reviewed time management at a later date with the principals and BSC staff. Subsequent implementation of Achievement Directed Leadership was relatively high at School B, but only moderate at School A. Approximately two rounds of observations, and two rounds of conferences were held at School B; one round each of observations and conferences was held at School A.

Student Achievement Test Results

In 1978, students in the Delaware School District were scoring around the national average, but well below the state average on the statewide standardized achievement tests. As noted above, RBS began to work in this district in January of 1979. Test results in the spring of 1979 showed high initial gains. Although several grades in the district registered decreases in 1980, these gains were, for the most part, reestablished in 1981 and sustained or extended in 1982.

Table 3 presents the average scores for grades 1-5 on the total basic skills battery of the California Achievement Tests (CAT) across five years (1978-82) in the Delaware District. The table also shows the change in the average scores registered from one testing year to the next. Scores are reported as normal curve equivalents, or NCEs. Except for the 1978-79

Table 3

Student Achievement Scores: Delaware School District

Grade Level	Total Scores[a]					Score Changes			
	Fall 1978	Spring 1979	Spring 1980	Spring 1981	Spring 1982	78-79	79-80	80-81	81-82
1	49	71	61	65	65	+22	-10	+4	0
2	52	64	67	65	65	+12	+3	-2	0
3	52	62	58	63	63	+10	-4	+5	0
4	52	61	63	64	65	+9	+2	+1	+1
5	56	65	60	62	69	+9	-5	+2	+7

[a]Scores on total battery of California Achievement Tests (Basic Skills) in normal curve equivalents for Schools A and B in Delaware School District. Except for the fall of 1978 and the spring of 1979, data represent the performance of different groups of students in each successive year.

school year when test scores were available for the same students in fall and spring, the scores in the horizontal rows for grades represent different groups of students in each successive year.

A basic assumption of the Title I norm-referenced model is that student achievement progresses at a rate consistent with that of students in the national norm group if no special treatment is introduced. In other words, an NCE gain of zero indicates that students' gain in achievement equals that of the representative national sample. Although many "rules of thumb" have been used to determine the educational significance of achievement test score gains, for the purpose of this report a change of five NCEs was determined to be educationally significant based on a statistical examination of the differences between grade means.

As Table 3 indicates, students in all five grades performed much better on the CAT in 1979 than they had in 1978. The gains, each of which was educationally significant, ranged from nine to 22 NCE points. In the following year (1979-80), three grades (grades one, three, and five) registered decreases, two of which were educationally significant. However, in 1980-81 all three of these grades registered gains, one of which was educationally significant, and in 1981-82 one of them registered an educationally significant gain while the other two had no NCE gains. The other two grades (grades 2 and 4) did not register any changes large enough to be considered educationally significant over the three years following the 1979 testing. These test scores are displayed in graphic form in Figure 1.

Student Achievement Scores
Delaware School District
1978 - 1982

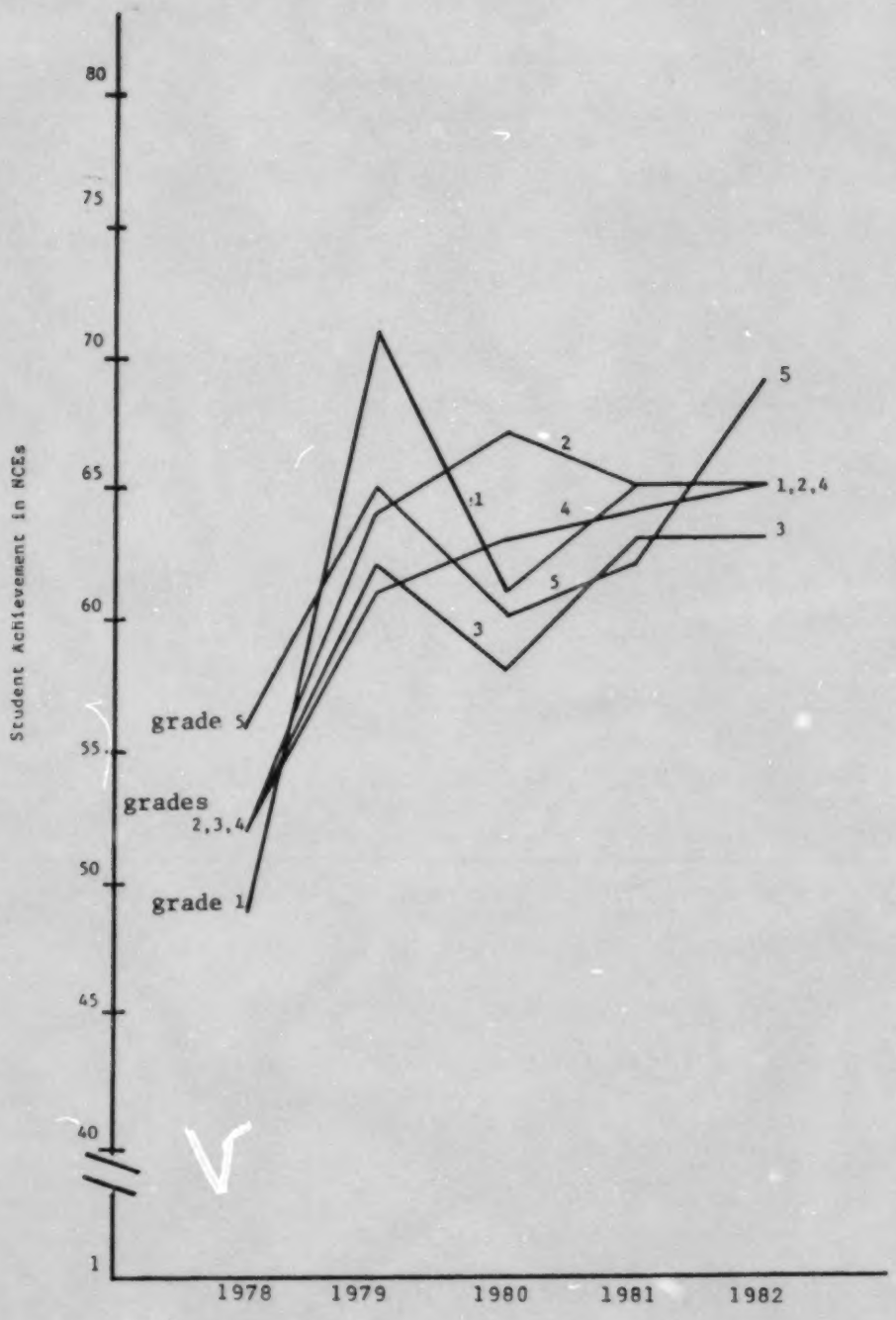

Figure 1: California Achievement Test results as NCEs; grades 1-5 across five years. Data reflect students' performance on the total battery of basic skills tests.

Discussion of Score Changes

There are several difficulties associated with relating achievement test score changes in the Delaware District to participation in the Achievement Directed Leadership program. First, the nature and extent of implementation of Achievement Directed Leadership in these schools changed from one year to the next. Second, while implementation at times was limited to one of the two schools, and at times to one subject area (reading), the achievement test score data presented here refer to the performance of students from both schools on the total battery of basic skills tests. Third, the improvement approach was not the sole educational intervention in the district. All of these factors could be used to refute the argument that gains in student achievement test scores can be attributed to the district's involvement in the program.

However, student achievement test scores in the Delaware District rose markedly during the first year of participation in the program, and most of the gains registered in 1979 seem to have been sustained over the years of further development and field testing of the approach. Again, although no direct correlation between student achievement test score gains and program implementation is established by these data, it is likely that Achievement Directed Leadership was responsible, in part, for the improvements in student achievement test scores.

Indeed, the district's superintendent corroborated this assertion in November of 1981, stating that the "improvements [in achievement test

scores] have been satisfying for all concerned and are no doubt attributable to the hard work of teachers and students, to the opportunities provided teachers for upgrading their professional skills, and to the assistance given to the district by RBS."

Appendix C:

Data Collection Forms/Instruments

CONTACT REPORT MEMO

TO: D. Helms/A. Graeber

FROM: *Writer's Name*

CONTACT: State_____ Site *(Remember, no school names--use codes)*

Date of Contact *Month, Date, Year*

Meeting ☐ Phone Call ☐ Time *(Not for phone calls)*

Participants: *Who participated with titles of new or rarely appearing participants.*

DATE: *Month, Date, Year*

1a. *An objective of the meeting/contact, including important precursors and preparations. Of extreme importance are your strategies and rationale for achieving the objective.*

1b. *Next objective, if any, including important precursors and preparations. The strategies and rationale planned for achieving the objective.*

etc.

2a. *What happened with respect to* 1a., *transactions, and outcomes.*

2b. *What happened with respect to* 1b., *transactions, and outcomes.*

etc.

3. *Other information learned during the call that is not directly related to an objective of the contact. These can be discussed in paragraph style and do not need to be labeled with letters. If no information was collected, type* 3. N/A.

4. *What I (the writer) need to do as a result of this contact. What is my problem-solving strategy? (e.g., Ask D. Helms to call Mr. Adams; Print 10 copies of the Orientation booklet; How can I involve the nonactive linker?) If no tasks accrue, type* 4. N/A.

5. Attention: *State Partner*
Names of others who should receive a copy of the report

2.5 revised 1-28-80

Basic Skills Instructional Improvement Program

TIME/District, Principal
Post-Session Questionnaire

Date: _____ Location: _____

Please rate each of the following by circling one of the five responses.

	Superior	Very Good	Average	Below Average	Poor
1. Expertise of the training staff	1	2	3	4	5
2. Quality of presentation/training	1	2	3	4	5
3. Quality of materials	1	2	3	4	5
4. Relevance of content	1	2	3	4	5
5. Likelihood that this program will work in your situation	1	2	3	4	5

6. What did you like best?

7. How could the session be improved?

8. Other comments?

The statements listed below represent objectives of this session. Please indicate below whether you can:

	On my own	With planning	With some assistance	Only with further instruction and assistance	Even with further instruction, may not be able to do	Not applicable
9. Define allocated time, engagement rate, and student engaged time.	1	*	3	4	5	N/A
10. Distinguish engaged from unengaged student behaviors in the classroom.	1	*	3	4	5	N/A
11. Record data on the engagement rate form and calculate engagement rate.	1	*	3	4	5	N/A
12. Complete an allocated time log.	1	*	3	4	5	N/A
13. Read and interpret one of the time graphs (find the expected achievement zone for a given amount of student engaged time).	1	*	3	4	5	N/A
14. Establish an appropriate goal for student engaged time.	1	2	3	4	5	N/A
15. Establish the corresponding goals for allocated time and engagement rate (for a given student engaged time goal).	1	2	3	4	5	N/A
16. Assist teachers in selecting appropriate strategies for increasing allocated time and engagement rate.	1	2	3	4	5	N/A
17. Help a teacher plan the implementation of a strategy to improve classroom management of students and management of instruction.	1	2	3	4	5	N/A
18. Schedule the initial round of classroom observations.	1	2	3	4	5	N/A
19. Help teachers assess the impact of their changes on classroom practice, especially student engaged time.	1	2	3	4	5	N/A

20. What specific points/questions need to be clarified in order for you to be able to use this training?

*This response option inappropriate for this item.

Basic Skills Instructional Improvement Program

TIME IMPLEMENTATION/District, Principal

Post-Session Questionnaire

Date: _____ Location: _____

Please rate each of the following by circling one of the five responses.

	Superior	Very Good	Average	Below Average	Poor
1. Expertise of the training staff	1	2	3	4	5
2. Quality of presentation/training	1	2	3	4	5
3. Quality of materials	1	2	3	4	5
4. Relevance of content	1	2	3	4	5
5. Likelihood that this program will work in your situation	1	2	3	4	5

6. What did you like best?

7. How could the session be improved?

8. Other comments?

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TIME IMPLEMENTATION/District, Principals

The following statements relate to planning for teacher training and implementation for student engaged time.

Please indicate the degree to which you believe you understand.

	Understand clearly	Understand somewhat	Understand vaguely	Don't understand
9. When announcement of teacher training session(s) will be made and person(s) responsible for making announcement.	1	2	3	4
10. Agenda and responsibilities for teacher training session.	1	2	3	4
11. Intended outcomes of the teacher training workshop.	1	2	3	4
12. What equipment will be needed for training, where it is located, and how to operate it.	1	2	3	4
13. What materials are needed: when and how materials will be printed.	1	2	3	4
14. Process for establishing an initial observation schedule and who will do initial observations.	1	2	3	4
15. Process to be used to alert teachers of the need to complete allocated time logs and pre-observation form on formal observation days.	1	2	3	4
16. How implementation sessions/conferences will be achieved (individual teacher-principal conference, small group or grade level meeting, whole faculty or combination).	1	2	3	4
17. How data will be shared with teachers, who and how comparisons with research will be made, and goals set.	1	2	3	4
18. How strategies will be developed and/or shared with teachers.	1	2	3	4
19. How inservice needs that are identified in selection phase will be handled.	1	2	3	4
20. What strategy principals will use in determining frequency of classroom observation.	1	2	3	4
21. The frequency and/or level of "low" student engaged time data that should signal a more serious (complex) intervention strategy.	1	2	3	4

22. I believe I can use the Time Leader's Guide. (Please check one)

- ☐ On my own, now
- ☐ With further study
- ☐ With some assistance
- ☐ Only with further instruction and assistance
- ☐ Even with further instruction, may not be able to do

23. What specific questions or concerns do you wish to have answered before the teacher training session or before implementation?

Basic Skills Instructional Improvement Program

CONTENT/District, Principals

Post-Session Questionnaire

Date: _____ Location: _____

Please rate each of the following by circling one of the five responses:

		Superior	Very Good	Average	Below Average	Poor
1.	Expertise of the training staff	1	2	3	4	5
2.	Quality of presentation/training	1	2	3	4	5
3.	Quality of materials	1	2	3	4	5
4.	Relevance of content	1	2	3	4	5
5.	Likelihood that this program will work in your situation	1	2	3	4	5
6.	What did you like best?	1	2	3	4	5
7.	How could the session be improved?	1	2	3	4	5
8.	Other comments?	1	2	3	4	5

The statements listed below represent objectives of this session. Please indicate below whether you can:

		On my own, now	With further study	With some assistance	Only with further instruction and assistance	Even with further instruction, may not be able to do	Not applicable
9.	Define prior learning, instructional overlap, and mastery.	1	2	3	4	5	N/A
10.	Use standardized achievement test data to project the classroom average percentile score that can be expected under "normal" instruction.	1	2	3	4	5	N/A
11.	Use test data to identify a class's specific prior learning strengths and weaknesses.	1	2	3	4	5	N/A
12.	Find the overlap between the content taught and the content measured by the test.	1	2	3	4	5	N/A
13.	Read an instructional overlap graph (find the expected achievement zone for a given percent of instructional overlap).	1	2	3	4	5	N/A
14.	Examine initial instructional plan and decide whether resulting overlap is appropriate for a specific situation.	1	2	3	4	5	N/A
15.	Assist teachers in completing long-term instructional plans.	1	2	3	4	5	N/A
16.	Assist teachers in completing unit plans.	1	2	3	4	5	N/A
17.	Help teachers review their progress on the long-term plan and their students' mastery of the topics covered.	1	2	3	4	5	N/A
18.	Assist teachers in revising their long-term plans, if necessary.	1	2	3	4	5	N/A

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19. What specific points/questions need to be clarified in order for you to be able to use this training?

Basic Skills Instructional Improvement Program
Planning for content implementation/District, principals
Post-Session Questionnaire

Date: _____ Location: _____

Please rate each of the following by circling one of the five responses.

	Superior	Very Good	Average	Below Average	Poor
1. Expertise of the training staff	1	2	3	4	5
2. Quality of presentation/training	1	2	3	4	5
3. Quality of materials	1	2	3	4	5
4. Relevance of content	1	2	3	4	5
5. Likelihood that this program will work in your situation	1	2	3	4	5

6. What did you like best?

7. How could the session be improved?

8. Other comments?

Plan[illegible] for content implementation/District, principal[illegible]

The following statements relate to content training and implementation. Please indicate the degree to which you understand:

	Understand clearly	Understand somewhat	Understand vaguely	Don't understand at all
9. How to interpret the data to be used for identifying prior learning strengths and weaknesses.	1	2	3	4
10. How teachers will calculate an estimate of instructional overlap.	1	2	3	4
11. How to code the assessment instruments to the curriculum guide.	1	2	3	4
12. When and how the prior learning data and School Year Planning Guides will be made available to faculty.	1	2	3	4
13. Intended outcomes of the content training workshop.	1	2	3	4
14. The roles and functions of teachers, principals, and district office staff in implementing the content variables.	1	2	3	4
15. How principals will monitor teacher implementation of instructional plans.	1	2	3	4

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16. I believe I can use the Content Leader's Guide (please check one)

- ☐ On my own, now
- ☐ With further study
- ☐ With some assistance
- ☐ Only with further instruction and assistance
- ☐ Even with further instruction, may not be able to do

17. What specific questions or concerns do you wish to have answered before the training session?

Basic Skills Instructional Improvement Program
Planning for Teacher Orientation

Post-Session Questionnaire

Date: _____ Location: _____

Please rate each of the following by circling one of the five responses.

	Superior	Very Good	Average	Below Average	Poor
1. Expertise of the training staff	1	2	3	4	5
2. Quality of presentation/training	1	2	3	4	5
3. Quality of materials	1	2	3	4	5
4. Relevance of content	1	2	3	4	5
5. Likelihood that this program will work in your situation	1	2	3	4	5

6. What did you like best?

7. How could the session be improved?

8. Other comments?

The following statements relate to the teacher orientation session. Please indicate the degree to which you understand:

	Understand clearly	Understand somewhat	Understand vaguely	Don't understand at all
1. The suggested agenda for the teacher orientation session.	1	2	3	4
2. The objectives or expected outcomes.	1	2	3	4
3. Type and number of materials needed.	1	2	3	4
4. Who will prepare materials.	1	2	3	4
5. Who, when, and how the announcement will be made to the faculty about the purpose, time, and place of the teacher orientation session.	1	2	3	4

Please indicate whether you can:

	On my own, now	With further study	With some assistance	Only with further instruction and assistance	Even with further instruction, may not be able to do
6. Find the following materials for teacher orientation in my principal's guide					
a. Rationale, strategy, and content outline	1	2	3	4	5
b. Handouts	1	2	3	4	5
c. Transparency masters	1	2	3	4	5
7. Present information from the orientation outline.	1	2	3	4	5
8. Discuss the roles and functions of teachers, principals, and district staff.	1	2	3	4	5
9. Answer likely questions about the basic skills instructional improvement program.	1	2	3	4	5
10. Follow up on individual teacher concerns.	1	2	3	4	5

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11. I believe the orientation session will be held on _____(date) at _____(location).

12. I believe the following people will be responsible for leading/assisting the teacher orientation session.

Leading _____

Assisting _____

13. What specific questions or concerns do you wish to have answered before the orientation?

Teacher Orientation
Basic Skills Instructional Improvement Program

Date _____ Location _____

Please indicate the degree to which you agree with the following statements.

	Strongly agree	Agree	No opinion	Slightly disagree	Strongly disagree
1. The presentation gave me information that helps me understand some of the activities planned for my school.	1	2	3	4	5
2. The materials used in the presentation were effective.	1	2	3	4	5
3. The improvement program described is relevant to my day-to-day classroom activities.	1	2	3	4	5
4. The improvement program described is relevant to my school's instructional program.	1	2	3	4	5
5. As a result of the presentation I am interested in the improvement program.	1	2	3	4	5
6. The improvement program will probably succeed in my school and classroom.	1	2	3	4	5

7. What do you like best about the program?

8. Was there information you believe should have been presented at the orientation session, but wasn't?

9. Are there concerns you have about the improvement program that you would like to discuss prior to program implementation?

10. The teacher's guide you were given at the orientation session is a developmental copy. Do you have specific suggestions for improving it? (For example, should it discuss or describe something that is not now discussed? Does it raise some concerns that it does not address?)

Please return to _____ By _____

Basic Skills Instructional Improvement Program

TIME/Teachers

Post-Session Questionnaire

Date: _____ Location: _____

Please rate each of the following by circling one of the five responses.

	Superior	Very Good	Average	Below Average	Poor
1. Expertise of the training staff	1	2	3	4	5
2. Quality of presentation/training	1	2	3	4	5
3. Quality of materials	1	2	3	4	5
4. Relevance of content	1	2	3	4	5
5. Likelihood that this program will work in your situation	1	2	3	4	5

6. What did you like best?

7. How could the session be improved?

8. Other comments?

The statements listed below represent objectives of this session. Please indicate below whether you can:

	On my own	With planning	With some assistance	Only with further instruction and assistance	Even with further instruction, may not be able to do	Not appli
9. Define allocated time, engagement rate, and student engaged time.	1	*	3	4	5	N/A
10. Distinguish engaged from unengaged student behaviors in the classroom.	1	*	3	4	5	N/A
11. Record data on the engagement rate form and calculate engagement rate.	1	*	3	4	5	N/A
12. Complete an allocated time log.	1	*	3	4	5	N/A
13. Read and interpret one of the time graphs (find the expected achievement zone for a given amount of student engaged time).	1	*	3	4	5	N/A
14. Establish an appropriate goal for student engaged time.	1	2	3	4	5	N/A
15. Establish the corresponding goals for allocated time and engagement rate (for a given student engaged time goal).	1	2	3	4	5	N/A
16. Select appropriate strategies for increasing allocated time and engagement rate.	1	2	3	4	5	N/A
17. Develop a plan for implementation of a strategy to improve classroom management of students or management of instruction.	1	2	3	4	5	N/A
18. Assess the impact of the strategies on classroom practice, especially student engaged time.	1	2	3	4	5	N/A

19. What specific points/questions need to be clarified in order for you to be able to use this training?

*This response option inappropriate for this item.

Basic Skills Instructional Improvement Program

CONTENT/Teachers

Post-Session Questionnaire

Date: _____ Location: _____

Please rate each of the following by circling one of the five responses.

	Superior	Very Good	Average	Below Average	Poor
1. Expertise of the training staff	1	2	3	4	5
2. Quality of presentation/training	1	2	3	4	5
3. Quality of materials	1	2	3	4	5
4. Relevance of content	1	2	3	4	5
5. Likelihood that this program will work in your situation	1	2	3	4	5

6. What did you like best?

7. How could the session be improved?

8. Other comments?

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CONTENT/Teachers

The statements listed below represent objectives of this session. Please indicate below whether you can:

	On my own, now	With further study	With some assistance	Only with further instruction and assistance	Even with further instruction, may not be able to do	Not applicable
9. Define prior learning, instructional overlap, and mastery.	1	2	3	4	5	N/A
10. Use standardized achievement test data to project the classroom average percentile score that can be expected under "normal" instruction.	1	2	3	4	5	N/A
11. Use test data to identify a class's specific prior learning strengths and weaknesses.	1	2	3	4	5	N/A
12. Find the overlap between the content taught and the content measured by the test.	1	2	3	4	5	N/A
13. Read an instructional overlap graph (find the expected achievement zone for a given percent of instructional overlap).	1	2	3	4	5	N/A
14. Examine initial instructional plan and decide whether resulting overlap is appropriate for a specific situation.	1	2	3	4	5	N/A
15. Complete a long-term instructional plan.	1	2	3	4	5	N/A
16. Complete a unit plan.	1	2	3	4	5	N/A
17. Review progress on the long-term plan and your students' mastery of the topic covered.	1	2	3	4	5	N/A
18. Develop revised long-term plans, if necessary.	1	2	3	4	5	N/A

19. What specific points/questions need to be clarified in order for you to be able to use this training?

Time Begin: _____

Date: _____

Respondent: _____

Interviewer: _____

BSC ADMINISTRATOR/TRAINER INTERVIEW

1. What do you see as the major goals and objectives of this approach?

   A. How do these goals or objectives fit in with your view of the school district's (or your particular school's) goals and objectives?

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2. To what extent do you think that the approach will succeed in your school district (or your particular school) in achieving its main objectives? (PROBE FOR EFFECTIVENESS RE IMPROVING STUDENT ACHIEVEMENT, CLASSROOM INSTRUCTION, AND INSTRUCTIONAL LEADERSHIP)

3. Based on your understanding of the approach thus far, what would you say are the approaches' most important features?

4. In August and September what did you think your main role in implementing the approach would be? (PROBE FOR WHAT R WOULD ACTUALLY BE DOING IN IMPLEMENTING THE APPROACH)

   A. Were there any major problems that made it difficult for you to perform this role as you viewed it? (IF YES, IDENTIFY PROBLEMS)

5. Now I'm interested in getting your specific reactions to the orientation and initial (technical) training you received from RBS on the use of the approach for this year's implementation. What are the most important things you feel you have learned from this training? (PROBE FOR SPECIFIC KNOWLEDGE AND SKILLS R MAY HAVE DEVELOPED)

(IF R IS A RESOURCE TEACHER, SKIP TO Q. 10;
OTHERWISE ASK Q'S 6, 7, 8, AND 9)

6. How adequately do you think you have been prepared to successfully implement the approach?

A. In what specific areas do you think you were <u>not</u> adequately prepared?

7. Have teachers in your school (district) received any inservice training on this project up to this point? (IF YES, ASK R TO DESCRIBE TRAINING)

8. Did you play any part in providing this training to teachers? (IF YES, ASK ABOUT BOTH CONTENT AND TIME TRAINING; IF NO, SKIP TO Q. 10)

A. Content

B. Time

9. Did you have any difficulties delivering any parts of the training? (PROBE FOR BOTH CONTENT AND TIME TRAINING)

A. Content

B. Time

(NOTE: RESOURCE TEACHERS AND COORDINATORS MAY NOT BE ABLE TO ANSWER Q'S 10 AND 11)

10. Are there any aspects of the approach that you feel have been difficult for teachers to implement?

11. How would you assess the teachers' overall reactions to the project thus far?

12. What suggestions do you have for RBS (or for the district) with respect to providing follow-up assistance to you on this project?

13. Do you have any other comments, questions, or concerns that you would like to share at this point about the project?

(TIME END): _____

PRINCIPAL/DISTRICT CONFERENCE

Using the school summary data, the principal and district leadership together, answer the following questions, agree on the opportunities for improvement, plan and take necessary action that will lead to improved instruction and greater student achievement.

1. Based upon entering achievement data, which classes offer the greatest opportunity for improvement this year in reading? In math?

2. Have teachers identified strengths and weaknesses on their Quarterly Plan for reading? math? What are the weakest areas?

3. How good is the match between Quarterly Plans and the Guide in reading? math? What are the exceptions?

4. How well are teachers maintaining the pace set by their quarterly plans for reading? math? Where is special help needed?

Principal/District Conference--Continued

5. How successful is the daily learning in reading? math? Where is special help needed?

6. What is the mastery rate in reading? math? Where is special help needed?

7. How well is time being used for reading? math? Where is special help needed?

Date: _____

Interviewer: _____

Interviewee: _____

BSC District Level Staff Interview

End of Year

I'd like to get some of your thoughts about the Achievement Directed Leadership Program with which you have been involved this year. I'd appreciate it if you would answer the following questions:

1. What percent of your time was spent doing tasks related to this program?

2. With what tasks were you involved?
(Probe for planning implementation, planning teacher inservice training, data collection e.g., scanning classes, conducting principal/teacher conferences, helping teachers plan basic skills instruction, attending principal seminars)

3. Generally, do you think this program was effective?
(Effective in terms of raising student achievement scores and improving classroom instruction.) If not, why not?

4. Can you think of any problems that made this program difficult to implement?

5. What did you like best about the program?

6. What did you like least about the program?

7. Do you have any suggestions for making the program more successful next year?

8. Do you have any other comments, questions or concerns about the program that you would like to share?

Date: _____

Interviewer: _____

Interviewee: _____

BSC Principal Interview

End of Year

I'd like to get some of your thoughts about the RBS School Improvement/ Achievement Directed Leadership program with which you have been involved this year. I'd appreciate it if you would answer the following questions?

1. How important is the improvement in basic skills instruction to you? (Probe: Is it one of the primary goals you have for your school?)

2. How important do you think the improvement in basic skills instruction is to parents who have students in this school?

3. What was your impression of/reaction to your students' 1982 achievement scores?

4. Overall, do you think this program was effective in your school? (Effective in terms of raising student achievement scores and improving classroom instruction) How?

5. Were there any problems that made it difficult for you to implement this program in your school? (If yes, identify)

6. Did you train teachers? If yes, did you feel comfortable training teachers in time? If not, why not?

In content? If not, why not?

Did training include success/mastery review?

7. Do you think the program helped you become more successful helping teachers plan basic skills instruction? Why/why not?

8. Do you think that the program helped you become a more effective supervisor of your school's basic skills program? Why/why not?

9. What did you like best about the program? Least?

10. How did district level staff/DOI help you implement this program in your school? If so, how? In what ways did this differ from past emphasis?

11. Did you find your conferences with the district level administrator helpful? (If not, why not?)

12. Do you have any suggestions for making the program more successful next year?

13. Do you have any other comments, questions or concerns about the program that you would like to share?

Date: _____

Interviewer: _____

Interviewee: _____

BSC Teacher Interview

End of Year

I'd like to get some of your thoughts abcut the instructional improvement program in which you have been involved and I'd appreciate it if you would answer these questions. Your answers will be confidential.

1. What do you see as the major goals of this basic skills improvement program?

2. Have these goals influenced the goals you set for your classes?

3. Did you receive enough training to sufficiently understand the program? If not, what didn't you fully understand?

4. Were there any problems that made it difficult for you to implement this program? (If yes, identify)
   PROBE: Did the classroom scans/observations for time-on-task present any problems? Did the Quarterly Topic Plans? Did the AT Log? Did the Curriculum Mapping Guide?

5. What instructional changes did you make as a result of your participation in the program? (i.e., What did you do differently in planning for, managing or instructing your class?)

6. What did you like best about the program?

7. What did you like least?

8. How did the principal work with you in implementing this program?

9. Did you find the Principal/Teacher Conferences helpful?

10. Generally, do you think the program was effective in your school? (Effective in terms of raising student achievement and improving classroom instruction) If not, why not.

11. Do you have any suggestions for making the program more successful next year?
PROBE: Is there anything the principal or district could do to help teachers implement the program better?

12. Do you have any other comments, questions or concerns about the program that you would like to share?

PRINCIPAL QUESTIONNAIRE

INSTRUCTIONAL IMPROVEMENT

Dear Principal,

This year, your district has been participating in a program designed to improve instructional leadership in the basic skills. Your cooperation in completing this questionnaire will be of great help in evaluating the success of the program. Please answer the questions by checking the appropriate box or filling in the appropriate blank. Thank you for your assistance.

ALL QUESTIONS REFER ONLY TO CURRENT SCHOOL YEAR.

Please estimate the percent of your time that was spent planning and implementing the Achievement Directed Leadership Program for your school. _____ %

How much of this time was spent

attending principal seminars _____

planning for implementation _____

planning for teacher inservice training _____

training teachers _____

helping teachers plan instruction _____

supervising teachers and holding principal/teacher conferences _____

attending superintendent/principal conferences _____

Did you conduct any inservice training in the area of:	YES	NO
student engaged time?	[ ]	[ ]
the overlap between the content you actually taught and the year-end standardized achievement test?	[ ]	[ ]
attention to students' prior learning deficiencies?	[ ]	[ ]
student success rate?	[ ]	[ ]
student mastery of basic skills content?	[ ]	[ ]
the effectiveness of review?	[ ]	[ ]

This year,	YES	NO	DON'T KNOW
Did central office staff members spend more time with you or your teachers planning and supporting basic skils instruction?	[ ]	[ ]	[ ]
In your opinion, did the overall effectiveness of the school district in supporting basic skills instruction increase?	[ ]	[ ]	[ ]

	YES	NO
Did you spend more time with teachers planning and helping them with basic skills instruction	[ ]	[ ]
In your opinion, did the overall effectiveness of your school in providing basic skills instruction increase?	[ ]	[ ]

	YES	NO	NOT SURE
In conferences with district level administrators, did you discuss:	[ ]	[ ]	[ ]
student engaged time?	[ ]	[ ]	[ ]
content coverage?	[ ]	[ ]	[ ]
prior learning?	[ ]	[ ]	[ ]
success rate?	[ ]	[ ]	[ ]
mastery?	[ ]	[ ]	[ ]
review?	[ ]	[ ]	[ ]

This year,	YES	NO
Were your teachers successful in reaching or maintaining levels of student engaged time associated with high achievement?	[ ]	[ ]
In general did your teachers actually cover more of basic skills subject matter that they had in previous years?	[ ]	[ ]
Were your teachers able to give more attention to students' prior learning deficiencies than in past years?	[ ]	[ ]
Would you say that your teachers' use of content review was more extensive and/or systematic than in past years?	[ ]	[ ]
As a result of the instructional improvement program, did your teachers change their method of instructional planning?	[ ]	[ ]
As a result of the instructional improvement program, did any of your teachers change their classroom management procedures?	[ ]	[ ]
As a result of the instructional improvement program, did any of your teachers change their techniques in the basic skills areas?	[ ]	[ ]
Overall, would you say that your teachers were more effective in providing basic skills instruction to students?	[ ]	[ ]

These questions refer only to the Achievement Directed Leadership program:	YES	NO
Have you thought about or discussed ways of improving the program?	[ ]	[ ]
Have you thought about the impact of the program on your school?	[ ]	[ ]
Have you thought about expanding the techniques of the program to areas other than the basic skills?	[ ]	[ ]
Did you actually expand the program's techniques in your school?	[ ]	[ ]
Would you say you were generally successful in doing the activities required by the program?	[ ]	[ ]
Would you say that, for your school, the program went smoothly?	[ ]	[ ]
Have you shared your ideas about the program with other principals?	[ ]	[ ]
What is your overall reaction to the basic skills instructional improvement program in which your school has been participating this year?	[ ]	[ ]
Very positive	[ ]	[ ]
Positive	[ ]	[ ]
Neutral	[ ]	[ ]
Negative	[ ]	[ ]
Very negative	[ ]	[ ]

Please feel free to use the back of the questionnaire to comment at length about the program.

TEACHER QUESTIONNAIRE

INSTRUCTIONAL IMPROVEMENT

Dear Teacher,

This year, your district has been participating in a program designed to improve instruction in the basic skills. Your cooperation in completing this questionnaire will be of great help in evaluating the success of the program. Please answer the questions by checking the appropriate box or filling in the appropriate blank. Thank you for your assistance.

ALL QUESTIONS REFER ONLY TO CURRENT SCHOOL YEAR.

	YES	NO
Did you look at research findings (on time and/or content graphs, etc.) to help you set improvement goals for your classrooms?	[ ]	[ ]
Did you use your classroom data and research to help you improve your teaching?	[ ]	[ ]
If you answered yes to the preceding question, did you actually do anything to improve in the area of:		
student engaged time?	[ ]	[ ]
the overlap between the content you actually taught and the year-end standardized achievement tests?	[ ]	[ ]
remediation of students' prior learning deficiencies?	[ ]	[ ]
student success rate?	[ ]	[ ]
student mastery of basic skills content?	[ ]	[ ]
review of basic skills subject matter?	[ ]	[ ]
Did you receive any inservice training in the area of:		
student engaged time?	[ ]	[ ]
the overlap between the content you actually taught and the year-end standardized achievement test?	[ ]	[ ]
attention to students' prior learning deficiencies?	[ ]	[ ]
student success rate?	[ ]	[ ]
student mastery of basic skills content?	[ ]	[ ]
the effectiveness of review?	[ ]	[ ]

	YES	NO
Did you receive any assistance (other than inservice training) related to:		
student engaged time?	[ ]	[ ]
content coverage?	[ ]	[ ]
attention to students' prior learning?	[ ]	[ ]
student success rate?	[ ]	[ ]
student mastery of basic skills?	[ ]	[ ]
review of basic skills subject matter?	[ ]	[ ]

This year,	YES	NO	DON'T KNOW
Did your principal spend more time with you planning and helping you with your basic skills instruction?	[ ]	[ ]	[ ]
In your opinion, did the overall effectiveness of your school in providing basic skills instruction increase?	[ ]	[ ]	[ ]
Did central office staff members spend more time planning and supporting basic skills instruction?	[ ]	[ ]	[ ]
In your opinion, did the overall effectiveness of the school district in supporting basic skills instruction increase?	[ ]	[ ]	[ ]
How many times was your classroom observed for the purpose of collecting data for student engaged time?	_____ (number)		
How many times did you have a formal conference as part of the basic skills instructional improvement program?	_____ (number)		

	YES ALWAYS	YES SOMETIMES	NEVER	NOT SURE
In these conferences, did you discuss:				
student engaged time?	[ ]	[ ]	[ ]	[ ]
content coverage?	[ ]	[ ]	[ ]	[ ]
prior learning?	[ ]	[ ]	[ ]	[ ]
success rate?	[ ]	[ ]	[ ]	[ ]
mastery?	[ ]	[ ]	[ ]	[ ]
review?	[ ]	[ ]	[ ]	[ ]

This year,	YES	NO
Were you successful in reaching or maintaining levels of student engaged time associated with high achievement?	[ ]	[ ]
Did you actually cover the amount of basic skills subject matter that you had planned to cover?	[ ]	[ ]
Were you able to give more attention to students' prior learning deficiencies than in past years?	[ ]	[ ]
Was your students' daily success rate appropriate?	[ ]	[ ]
Did more of your students master more basic skills objectives than in past years?	[ ]	[ ]
Was your use of review more systematic than in past years?	[ ]	[ ]
Did you change your method of instructional planning?	[ ]	[ ]
Did you change your classroom management procedures?	[ ]	[ ]
Did you change your teaching techniques in the basic skills areas?	[ ]	[ ]
Overall, were you more effective in providing basic skills instruction to your students?	[ ]	[ ]

	YES	NO
These questions refer only to the basic skills instructional improvement program:		
Have you thought about or discussed ways of improving the program?	[ ]	[ ]
Have you thought about the impact of the program on your classroom and school?	[ ]	[ ]
Have you thought about expanding your use of the techniques of the program to areas other than the basic skills?	[ ]	[ ]
Did you actually expand your use of the program's techniques in your classroom?	[ ]	[ ]
Would you say you were generally successful in doing the activities required by the program?	[ ]	[ ]
Would you say that, for you, the program went smoothly?	[ ]	[ ]
Have you shared your ideas about the program with other teachers?	[ ]	[ ]

What is your overall reaction to the basic skills instructional improvement program in which your school has been participating this year?

Very positive	[ ]
Positive	[ ]
Neutral	[ ]
Negative	[ ]
Very negative	[ ]

Please feel free to use the back of the questionnaire to comment at length about the program.

INSTRUCTIONAL IMPROVEMENT

11-20-81

Time Begin: _____
Respondent: _____
Interviewer: _____
Date: _____

BSC PRINCIPAL INTERVIEW
(Participatory Supervision)

1. How many conferences have you held up to now?

_____

2. Approximately with what percentage of the teachers have you had conferences?

_____%

3. How long has a typical conference been?

_____ minutes

4. Where were conferences primarily held?

_____ Principal's office

_____ Teacher's classroom

_____ Other (SPECIFY)

5. During what part of the day were conferences held? (CHECK AS MANY AS APPLY)

_____ Lunch time

_____ Planning period

_____ Before or after school hours

_____ Other (SPECIFY): _____

6. Were there any others besides you and the teacher present at any of the conferences?

_____ Yes(ASK Q.'s 6A-6D)

_____ No (GO TO Q. 7)

A. Who? (ASK FOR NAME AND TITLE)

B. How did he/she participate in the conferences?

C. Did he/she participate in most or all the conferences?

_____ Yes

_____ No

D. How was it decided that he/she would participate in the conferences?

7. Did you do anything to prepare teachers for the conferences before they were actually held?

_____ Yes (ASK Q. 7A)

_____ No (GO TO Q. 8)

A. What did you do and why?

8. What did you say to teachers to begin your conferences?

9. Could you briefly describe a typical conference - how it was organized and what things you talked about? (PROBES: DID R USE TEACHER/PRINCIPAL CONFERENCE FORM TO STRUCTURE CONFERENCE, AND IF SO, HOW? WHAT WAS GIVEN MOST ATTENTION, TIME OR CONTENT?)

10. How would you characterize the overall tone or affect of your conferences? (PROBE FOR TRUST LEVEL, SPIRIT OF COLLABORATION)

(ASK Q.'s 11-13 IF R USED TEACHER/PRINCIPAL CONFERENCE (T/P) FORM. OTHERWISE SKIP TO Q. 14)

11. Were there any questions on the T/P Form that were difficult to understand? (SHOW R T/P FORM)

_____ Yes (ASK Q. 11A)

_____ No (GO TO Q. 12)

A. Which questions were difficult and why?

12. Did you have all the necessary information available at the conference to discuss the questions on the T/P Form? (e.g., classroom observation data; achievement data; mapping guide; etc.)?

_____ Yes (ASK Q. 12A)

_____ No (GO TO Q. 13)

A. What information did you not have? (PROBE REASON(S) WHY NOT)

13. Were there any problems using or interpreting the information you had?

_____ Yes (YES Q. 13A)

_____ No (GO TO Q. 14)

A. What problems?

14. Who conducted the classroom observations? (CHECK AS MANY AS APPLY)

_____ Principal

_____ Assistant Principal

_____ Teacher

_____ District Office Staff

_____ Other (SPECIFY): _____

15. Describe how the classroom observations were done and any problems you had?

16. As a result of conferences:

A. Were any specific opportunities or needs for instructional improvement identified? (IF YES, ASK R TO GIVE ONE SALIENT EXAMPLE)

B. Were any tentative goals set for improving instruction? (IF YES, ASK R TO GIVE ONE SALIENT EXAMPLE)

C. Were any specific strategies selected for reaching goals that were set? (IF YES, ASK R TO GIVE ONE SALIENT EXAMPLE)

D. Were any plans developed for implementing strategies for improving instruction? (IF YES, ASK R TO GIVE ONE SALIENT EXAMPLE)

E. Were any plans developed for determining whether teachers are in fact using the improvement strategies that were selected? (IF YES, ASK R TO GIVE ONE SALIENT EXAMPLE)

17. In your opinion, were conferences beneficial or not beneficial in terms of fostering improvement in basic skills instruction? (PROBE REASONS)

A. Were conferences beneficial in any other way?

18. Do you have any suggestions for improving the conferences, for example, in terms of:

A. The procedures for getting the necessary information for conferences? (IF YES, EXPLAIN)

B. The content to be covered in the conference? (IF YES, EXPLAIN)

C. The T/P Conference Form or any other forms designed to facilitate the conference? (IF YES, EXPLAIN)

D. Anything else?

19. Have you had opportunities yet to see if any instructional improvement strategies have actually been implemented in the classroom?

_____ Yes (ASK Q.'s 19A-19C)

_____ No (GO TO Q. 20)

A. What have you (or anyone else) done for follow-up?

B. How many classrooms have been followed-up?

_____

C. What have been the results of this follow-up?

20. Have you received any assistance or support from the district's central office with regard to implementing this supervision process?

_____ Yes (ASK Q. 20A)

_____ No (GO TO Q. 21)

A. What kind of support?

21. Are there any other comments you would like to make about the conferences or about the program in general?

22. We would like to identify about 5-10 teachers in your school with whom we could talk about the conferences. (SHOW R THE BSC TEACHER INTERVIEW) Could you identify some teachers you feel <u>might</u> be in need of special help to improve their instruction and some other teachers who are probably <u>not</u> in need of special help. We would like to get the perspectives of both sets of teachers. (HAVE R INDICATE WHICH TEACHERS ARE IN NEED OF HELP)

Name of Teacher	Grade Level	Name of Teacher	Grade Level
_____	( )	_____	( )
_____	( )	_____	( )
_____	( )	_____	( )
_____	( )	_____	( )
_____	( )	_____	( )

10/13/81

Grade _____

Quarter (circle)

1 2 3 4

TEACHER/PRINCIPAL CONFERENCE

Teacher and principal together answer the following questions, agree on the opportunities for improvement and plan necessary actions that will lead to improved student achievement.

	Reading/ Language Arts	Math
1. The entering achievement level of this class is:		
a. 55th percentile or above	1a ☐	1a ☐
b. 46th to 54th percentile	1b ☐	1b ☐
c. 45th percentile or below	1c ☐	1c ☐
Comment/Opportunity/Plan:		
2. Are the skill-related strengths and weaknesses indicated on the Quarterly Topic Plan?		
Comment/Opportunity/Plan:	2 Yes ☐	2 Yes ☐
	2 No ☐	2 No ☐
3. Of the topics listed in the Basic Skills Management Guide the Quarterly Topic Plan indicated:		
a. 80 - 100% of Guide covered	3a ☐	3a ☐
b. 60 - 79% of Guide covered	3b ☐	3b ☐
c. Less than 60% of Guide covered	3c ☐	3c ☐
Comment/Opportunity/Plan:		

Teacher/Principal Conference--Continued

	Reading/ Language Arts		Math	
4. The class is covering the Quarterly Topic Plan at the following pace:				
a. More than 4 days ahead of plan	4a	☐	4a	☐
b. ± 4 days from planned	4b	☐	4b	☐
c. More than 4 days behind plan	4c	☐	4c	☐

Comment/Opportunity/Plan:

5. Students' daily work in this quarter indicated:				
a. 80 - 100% are successful most of time	5a	☐	5a	☐
b. 50 - 79% are successful most of time	5b	☐	5b	☐
c. Less than 50% are successful most of time	5c	☐	5c	☐

Comment/Opportunity/Plan:

6. The percent of students mastering skills at the planned rate during the quarter is:				
a. 80 - 100% of class	6a	☐	6a	☐
b. 50 - 79% of class	6b	☐	6b	☐
c. Less than 50% of class	6c	☐	6c	☐

Comment/Opportunity/Plan:

Teacher/Principal Conference--Continued

	Reading/ Language Arts	Math
7. The average student engaged time is:	_____ min.	_____ min.
The average student engaged time predicts end of year achievement:		
a. above expected	7a ☐	7a ☐
b. at expected	7b ☐	7b ☐
c. below expected	7c ☐	7c ☐
Comment/Opportunity/Plan		
8. The average allocated time is:	_____ min.	_____ min.
a. above district minimum	8a ☐	8a ☐
b. at district minimum	8b ☐	8b ☐
c. below district minimum	8c ☐	8c ☐
Comment/Opportunity/Plan		
9. The average engagement rate is:	_____ %	_____ %
a. 70 - 90%	9a ☐	9a ☐
b. 50 - 69%	9b ☐	9b ☐
c. Below 50%	9c ☐	9c ☐

Teacher/Principal Conference--Continued

	Reading/ Language Arts	Math
10. Opportunity for improvement in engagement rate is greatest in the following category:		
	M ☐	M ☐
	S ☐	S ☐
	D ☐	D ☐
	U ☐	U ☐
	O ☐	O ☐

Comment/Opportunity/Plan:

CO 12/11/80 CONTENT FORM

Test CAT Form C Level 14 Subtest Reading Vocabulary

Teacher # _____ Dates Completed _____ Notes _____

[/] Expected Coverage [X] Covered

Content Measured by Test Item	Code No.	Percent of Class					
		0	1-10	11-30	31-70	71-90	91-100
SAME MEANING (SYNONYMS) The student silently reads a phrase and four (4) possible choices. The student selects the word that means the same as the underlined word in the phrase.							
1.							
2.							
3.							
4							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.							
19.							

Level 14 Subtest Reading Vocabulary [/] Expected Coverage [X] Covered

Content Measured by Test Item	Code No.	Percent of Class					
		0	1-10	11-30	31-70	71-90	91-100
OPPOSITE MEANING (ANTONYMS) The student silently reads a phrase and four (4) possible choices. The student selects the one word that means the opposite of the underlined word in the phrase.							
21.							
22.							
23.							
24.							
25.							
MULTIPLE MEANING The student silently reads a definition and three (3) sentences below it. The student selects the sentence in which the underlined word is used as described in the definition. EXAMPLE: post: a piece of wood o Ed went to the post office. o She hung her coat on the post. o The teacher will post the notice.							
26.							
27.							
28.							
29.							
30.							

Test CAT Form C Level 14 Subtest Reading Comprehension

Teacher # _____ Dates Completed _____ Notes _____

[/] Expected Coverage [X] Covered

Content Measured by Test Item	Code No.	Percent of Class					
		0	1-10	11-30	31-70	71-90	91-100
LITERAL COMPREHENSION							
The student silently reads a selection and the questions that follow it. The student selects the word or phrase, from four (4) possible choices, that best answers the question.							
RECALL OF FACTS							
31. Narrative - Who?							
[illegible] " - Where?							
64. " "							
49. " - What?							
52. " "							
58. " "							
59. " "							
56. " - When?							
62. " - How?							

CO 12/11/80

CONTENT FORM (cont'd)

Level 14 Subtest Reading Comprehension [/] Expected Coverage [X] Covered

Content Measured by Test Item	Code No.	Percent of Class					
		0	1-10	11-30	31-70	71-90	91-100
INTERPRETIVE COMPREHENSION							
INFERRED MEANING							
34. Narrative - main idea							
50. " " "							
61. " " "							
51. " - conclusion							
60. " "							
53. " - cause/effect							
63. " " "							
65. " " "							
CHARACTER ANALYSIS							
33. Narrative - feeling							
40. " "							
32. " - motive							
38. " "							
39. " "							
35. " - trait							
57. " "							
54. " - attitude							
37. " - compare characters							
55. " " "							

Level 14 Subtest Reading Comprehension [/] Expected Coverage [X] Covered

Content Measured by Test Item	Code No.	Percent of Class: 0	1-10	11-30	31-70	71-90	91-100
FIGURATIVE LANGUAGE							
46. Poetry - simile							
66. Sentence - simile							
68. " "							
47. Poetry - metaphor							
69. Sentence - metaphor							
67. " - hyperbole							
70. " "							
48. Poetry - personification							
CRITICAL COMPREHENSION							
REAL/UNREAL ELEMENTS							
The student reads three (3) sentences and selects the one sentence that tells about something that could really happen.							
AUTHOR ATTITUDE/POSITION							
41. Report - fact/opinion							
42. " " "							
43. " " "							
45. " " "							
44. " - compare viewpoints							

CO
11/10/80

State_____
District_____
School_____
Teacher_____

SUMMARY SHEET FOR INSTRUCTIONAL OVERLAP

State # _____ Teacher #_____ Subject _____

District #_____ Grade _____ Test _____

School # _____ Date(s) _____ Form _____ Level _____

2H3

DIRECTIONS

- Count the slashes (/) in each column for each page of the Content Form and record the counts in the appropriate spaces.
- Add each column to find the total number of slashes in each column.
- Add Total row to find total number of slashes on all pages and record below.
- Find total number of test items and record below.
- If total number of slashes is not equal to total number of test items, check column totals and counting of slashes.
- Multiply each total by the indicated midpoint to get a product for each percent of class.
- Record the sum of the product row in the last box. This sum is the number of items covered by the average student.
- Divide the average raw score by the number of items on the test to get the percent of overlap for expected coverage.

EXPECTED COVERAGE (/)

	PERCENT OF CLASS					
PAGE NO.	0	1-10	11-30	31-70	71-90	91-100
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
13.						
14.						
15.						
TOTAL						
MIDPOINT	0	.05	.20	.50	.80	.95
PRODUCT						

Total Number of Slashes _____

Total Number of Test Items _____

AVERAGE RAW SCORE [ ]

Expected Coverage Overlap = $\frac{\text{Average Raw Score}}{\text{Total No. of Test Items}}$ = _____ = _____%

State _____
District _____
School _____
Teacher _____

SUMMARY SHEET FOR TIME

State # _____ School # _____ Grade _____
District # ____ Teacher # _____ Year _____

2H7

READING/LANGUAGE ARTS

5/28/81

Date	Coder #	Part of Period	Engagement Rate	Allocated Time	Student Engaged Time	Average Student Engaged Time

MATH

Date	Coder #	Part of Period	Engagement Rate	Allocated Time	Student Engaged Time	Average Student Engaged Time

Student Engaged Time = Allocated Time x Engagement Rate

DIRECTIONS

1. Use this form to summarize data throughout the school year.
2. Fill in the information at the top of the form.
3. Record the date(s) of observation. One line on the form is used for each day.
4. Record the total allocated time (in minutes) from the Allocated Time Log for each subject.
5. Record the coder numbers, parts of the period observed, and average engagement rate for all observations made on that date.
6. Find the student engaged time (allocated time x engagement rate).
7. Find the average student engaged time for all observations by adding all of the entries in the student engaged time column and dividing by the number of entries.

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Appendix D

Development of Summary Indices Describing
Level of Program Implementation

Development of Summary Indices Describing Level of Program Implementation

A large amount of information regarding implementation of the Achievement Directed Leadership approach was collected during the field test. Data sources included questionnaires, interviews, and observations throughout the school year. Summary indices were developed to reduce the quantity of data into simple descriptors of level of implementation at the principal, teacher and overall school levels. These summary indices describe whether level of implementation was high (index = 3), medium (index = 2), or low (index = 1) with respect to expectations suggested by the program model. Each index summarizes more specific indices which describe principal or teacher attitudes and behaviors. High ratings for these specific indices indicate that the teacher or principal behavior or attitude is at a level which closely approximates an ideal implementation of the program with respect to that particular variable. Low indices, on the other hand, indicate that implementation is well below ideal levels. Medium indices fall between these extremes; they suggest that implementation, although not perfect, is generally satisfactory but not of sufficient magnitude to warrant a high rating.

Decision rules for the assignment of specific indices were somewhat arbitrary. They were essentially based on subjective judgments by the program evaluators with respect to what could be reasonably expected of principals and teachers under the circumstances of the field test. In addition, all indices are based on self-report data provided by teachers,

principals, and BSC staff. The reliability and validity of these data are uncertain. The composition of each summary index is briefly described below.

Principal Level Implementation Index

The principal level implementation index is comprised of four variables, as described in Table D-1. A specific index was derived for each variable. The specific indices, when added together, form the basis for the overall principal level index for each school. Sums of the four indices totaling ten or more were arbitrarily assigned high ratings, sums of eight or nine were assigned medium ratings, and sums of seven or below were given low ratings. Since results are very subjective, they should be viewed cautiously. In a sense, they describe some relative differences between principals.

Teacher Level Implementation Index

The teacher level implementation index is comprised of six variables, as described in Table D-2. A specific index was derived for each variable. All indices were based on average responses to the Teacher Questionnaire. As with the overall principal level index, the overall teacher level index was based on the sum of all specific indices for each school. Sums of the six indices totaling 15 or more were arbitrarily assigned high ratings, sums between 10 and 14 were assigned medium ratings, and sums of nine or below were given low ratings. Again, results are subjective and should be cautiously interpreted. The summary index provides a general description of the relative differences between teachers at the specific schools.

Table D-1

Description of Principal Level Implementation Indices

Variables	Description	Data Sources	Decision Rule for Index[a]		
			Low 1	Medium 2	High 3
Number of classroom observations	Average number of times principal observed each teacher's classroom; six were planned	Teacher questionnaire	$x<6.0$	$6.0 \leq x < 7.0$	$x \geq 7.0$
Number of principal/teacher conferences	Average number of conferences with each teacher; three were planned	Teacher questionnaire, principal/teacher conference form	$x<3.0$	$3.0 \leq x < 3.7$	$x \geq 3.7$
Training results	Total index represents the average of six specific indices, three for the content workshop and three for the time workshop. These workshop indices include measures of (1) overall reaction to training, (2) expectations regarding likelihood of success, and (3) perceived knowledge and skill development	Teacher training questionnaires	$x<3.4$	$3.4 \leq x < 4.0$	$x \geq 4.0$
Attitude toward program	General affect, enthusiasm	BSC contacts/observations, interviews, principal questionnaire	BSC judgment	BSC judgment	BSC judgment

[a] For training results, the decision rules were applied to the six specific indices which make up the overall index.

Table D-2

Description of Teacher Level Implementation Indices

Variables	Description	Data Sources	Decision Rule for Index		
			Low 1	Medium 2	High 3
Research use	Combination of measures of teachers' reported use of research/classroom data to set improvement goals and improve teaching	Teacher questionnaire	x<50% positive responses	50%≤x<70% positive responses	x≥70% positive responses
Instructional improvements	Combination of measures of teachers' reported improvements in student engaged time, content overlap, prior learning, student success, mastery, and content review	Teacher questionnaire	Same	Same	Same
Success in implementation	Combination of measures of teachers' reported success in implementing Achievement Directed Leadership components related to: student engaged time, content overlap, prior learning, student success, mastery, and content review	Teacher questionnaire	Same	Same	Same
Changes in teaching behavior	Combination of measures of teachers' reported changes in instructional planning, classroom management, and teaching techniques	Teacher questionnaire	Same	Same	Same
Improved classroom effectiveness	Teachers' overall perception of effectiveness of basic skills instruction relative to prior year	Teacher questionnaire	Same	Same	Same
Attitude toward program	Teachers' overall reaction; mean rating; scale of 1 (very negative) to 5 (very positive)	Teacher questionnaire	x<3.0	3.0≤x<3.5	x≥3.5

Overall Schoolwide Implementation Index

The overall schoolwide implementation index represents the sum of the four specific principal level indices and the six teacher level indices. Thus, the overall summary index is influenced more by teacher behaviors than by principal behaviors. The rationale for this weighting schema is that classroom level implementation (i.e., teacher) will, most likely, have a greater effect on student achievement. Overall sums of the ten indices totaling 25 or more were assigned high ratings, sums between 18 and 24 were assigned medium ratings, and sums of 17 or below were given low overall ratings. Since a large quantity of data went into each overall schoolwide index, these indices are probably fairly good estimates of the relative level of program implementation for each school within a district.

Appendix E:

Self-Assessment Results

District/Principal Workshops -
New Jersey School District

Self Assessment Results: Content Workshop
District/Principals: New Jersey School District

Objective (N =)	On my own	With further study	With some assistance	Only with further instruction and assistance	Even with further instruction, may not be able to do	Not Applicable
Define prior learning, instructional overlap, and mastery. (n=24)	54%	17%	25%	4%	0%	0%
Use standardized achievement test data to project the classroom average percentile score that can be expected under "normal" instruction. (n=24)	37%	37%	21%	4%	0%	0%
Use test data to identify a class's specific prior learning strengths and weaknesses. (n=25)	44%	36%	20%	0%	0%	0%
Find the overlap between the content taught and the content measured by the test. (n=25)	42%	39%	12%	8%	0%	0%
Read an instructional overlap graph (find the expected achievement zone for a given percent of instructional overlap.) (n=26)	36%	24%	32%	8%	0%	0%
Examine initial instructional plan and decide whether resulting overlap is appropriate for a specific situation. (n=25)	36%	24%	32%	8%	0%	0%
Assist teachers in completing long-term instructional plans. (n=25)	40%	24%	24%	12%	0%	0%
Assist teachers in completing unit plans. (n=25)	48%	20%	28%	4%	0%	0%
Help teachers review their progress on the long-term plan and their students' mastery of the topics covered. (n=25)	36%	20%	40%	4%	0%	0%
Assist teachers in revising their long-term plans, if necessary. (n=25)	40%	16%	40%	4%	0%	0%

Self Assessment Results: Planning Seminar
District/Principals: New Jersey School District

Skill (n =)	On my own	With further study	With some assistance	Only with further instruction and assistance	Even with further instruction may not be able to do
Teacher Orientation					
Locate rationale, strategy, content outline (19)	47%	32%	21%	-	-
Locate handouts (19)	47%	37%	16%	-	-
Locate transparency masters (19)	37%	47%	11%	5%	-
Present information from outline (19)	37%	47%	16%	-	-
Discuss staff roles and functions (20)	40%	40%	20%	-	-
Answer questions (19)	37%	32%	32%	-	-
Follow-up concerns (19)	26%	37%	37%	-	-
Content Implementation					
Use Content Leader's Guide (13)	15%	69%	8%	8%	-
Time Implementation					
Use Time Leader's Guide (23)	43%	39%	9%	9%	-

Self-Assessment Results: Time Workshop

District/Principal: New Jersey School District

Objective (N =)	On my own	With planning	With some assistance	Only with further instruction and assistance	Even with further instruction, may not be able to do	Not applicable
Define allocated time, engagement rate, and student engaged time. (n=25)	60%	*	32%	4%	0%	4%
Distinguish engaged from unengaged student behaviors in the classroom. (n=23)	83%	*	13%	0%	0%	4%
Record data on the engagement rate form and calculate engagement rate. (n=23)	74%	*	17%	4%	0%	
Complete an allocated time log. (n=24)	75%	*	21%	0%	0%	
Read and interpret one of the time graphs (find the expected achievement zone for a given amount of student engaged time.) (n=24)	63%	*	33%	0%	0%	
Establish an appropriate goal for student engaged time. (n=25)	24%	28%	44%	0%	0%	
Establish the corresponding goals for allocated time and engagement rate (for a given student engaged time goal.) (n=20)	30%	40%	20%	5%	0%	5%
Assist teachers in selecting appropriate strategies for increasing allocated time and engagement rate. (n=25)	28%	4?%	20%	4%	0%	4%
Help a teacher plan the implementation of a strategy to improve classroom management of students and management of instruction. (n=26)	38%	35%	19%	4%	0%	4%
Schedule the initial round of classroom observations. (n=26)	58%	27%	8%	4%	0%	4%
Help teachers assess the impact of their changes on classroom practice, especially student engaged time. (n=26)	38%	35%	19%	4%	0%	4%

Appendix F:

District Checklists

District Linker Checklist for Time

Could be done during Orientation

1. Insure/secure district support for building participation.
   - Number of buildings + teachers.
   - Resources needed (e.g. release time, $, inservice credit).
   - Administrative sanction (superintendent's approval recommended).
2. Clarify district parameters of program participation (e.g. teachers must volunteer).
3. Plan and deliver awareness about time for principals.

---

1. Determine the recipients and mode of the district training--district personnel, principals, or teachers.
   - Formation of an IIT.
   - Identify roles and responsibilities at each level.
2. Develop an overall plan for SET training.
   - Schedule dates and times.
   - Determine whether participants can/will work on their own between meetings
   - Budget training time.
3. Plan and conduct training sessions as outlined in Leader's Guide for Time.
   - Prepare agendas.
   - Secure videotape players, overhead projectors and calculators.
   - Learn to operate a videotape player--including locating different parts of the videotape.
   - Reproduce handouts and transparencies.
   - Notify participants of meetings.

- Devise a strategy for assessing participant's mastery of engagement rate observation training.
  - grade own
  - hand in/assess
- Share with principals the ramifications of the decisions as to who will actually perform the classroom observations, the number of observations and the length.
  - training time
  - scheduling of observations
  - affect on observees
  - match with school climate -- clinical supervision
    -- peer supervision
  - constant observer for one teacher, a variety of observers
  - budgeting or covering
  - number of cycles
- Discuss the use of codes on data collection forms.
- Provide principals with strategies that can be used to release teachers for data collection.
  - rotating substitutes
  - free period observation
  - principal subs in observer's room
- Share with principals the ramifications that school instructional groupings and pullout programs have on
  - training decisions
  - observation collection
- Devise a strategy for dealing with resource guides/availability for phase three--idea of program and teacher centering links to ISA and/or local teacher training institutions.
- Deal with the impact that data collection may have upon district/state mandates about allocated time for subject areas and for pull-out programs.
- Consider long-term versus short-term change strategies--need to make other changes (perhaps more radical) if SET remains in an unsatisfactory area.

4. Identify district needs to evaluate the program and plan for such evaluation: data needed, how collected, by whom, when, and how to report.

5. Prepare and assist the principal to perform the functions listed on the principal's checklist.

Appendix G:

Principal Checklist

Principal's Checklist for Implementation of Time Variable*

Leading

The principal is the instructional leader for the school building. It is the principal's responsibility to carry out or to delegate (but maintain the responsibility for) each of the tasks/activities listed below. As noted in section II of this guide, the principal's personal participation and encouragement are extremely important. Thus, there will be some activities that the principal should not delegate.

Planning Collaboratively

1. Review district's overall plan for implementation of the time variable (e.g., who observes, frequency of observations, etc.).

2. Identify date for teacher workshops for new or previously untrained teachers. Estimate the number of teachers involved.

3. Develop a plan for time workshops for teachers (perhaps with a teacher committee).

4. Devise a plan for dealing with in-service needs of teachers that are identified in the Phase Three activities. Will principal, district, or regional education agency assist in providing for these needs?

5. Announce date, place, time, and purpose of workshop.

    a. Relate workshop activities to overall district and school goals.

*Principals are reminded that in addition to the notes provided at the end of this session the Time Leader's Guide will answer many specific questions about methods and materials.

b. Inform participants of materials they need to bring.

Training

1. Learn to operate district videotape equipment--including locating different parts of the videotape and answer keys for coding tapes.

2. Make last minute check on leaders, video equipment, materials, facilities, notice to teachers.

3. Conduct teacher workshop as outlined in planning sessions with district staff. Outcomes of workshop should include

   a. an understanding among teachers of the goals and expected benefits of participation in time variable activities for the school and the individual teacher,

   b. an understanding of the rationale and critical variables (engagement rate, allocated time, student engaged time, and student success) related to the time variable,

   c. an understanding of what is meant by engaged and unengaged behaviors and what observers will be coding and calculating on the engagement rate form,

   d. knowledge of how and when to complete an allocated time log,

   e. an understanding of the distinction between managing students and managing instruction; knowledge of location of strategies for improving engagement rate and allocated time,

f. observation schedule for the initial round of classroom observations, and

g. get an understanding of the expectations the principal has and the procedures the principal will follow in working with teachers on the data that will be collected.

4. Evaluate teacher workshop (see evaluation form that follows this list).

Participating

1. Develop and implement a way of reminding teachers to complete allocated time logs on observation days.

2. Carry out observation schedule (initial and follow-up) collecting engagement rate data.

3. Help teachers complete summary sheets and set goals for student engaged time, allocated time, and engagement rate.

4. Help teachers select, implement, and monitor strategies to meet goals.

5. Implement any identified school-wide strategies concerning allocated time or engagement rate.

6. Work with individual teachers whose student engaged time remains unsatisfactory. Consider long-term versus short-term change strategies--need to make other changes (perhaps more radical) if student engaged time remains in an unsatisfactory area.

7. Synthesize teacher inservice and professional growth needs based on data collected from plans and consultations with teachers.

8. Arrange inservice by district or regional agency for groups of teachers with same interest or need.

9. Attend district meeting to learn additional strategies or techniques for working with teachers.

10. Communicate to district any observed scheduling (pullouts, special classes) procedures that lower allocated time for buildings/classrooms.

11. Collect information needed to review success of time variable implementation.

    a. Collect teachers' completed Summary Sheets at end of year.

    b. Analyze process and achievement data for each instructional group.

       - student engaged time
       - percentile ranks

Principal's Checklist for Implementing Instructional Planning (Content Variables)*

Leading

The principal is the instructional leader for the school building. It is the principal's responsibility to carry out or to delegate (but maintain responsibility for) each of the tasks/activities listed below. As noted in the previous section of this guide, the principal's personal participation and encouragement are extremely important. Thus there will be some activities the principal should not delegate.

Planning Collaboratively

1. Review district's overall plan for systematic instructional planning.

2. Identify August or September date(s) for teacher workshop(s). Estimate number of teachers involved.

3. Identify (with district) source of prior learning data (test data or pupil profiles).

4. Identify (with district) materials to be used in work on instructional overlap (test descriptions, district curriculum guide, basal text).

5. Assist district with any needed curriculum-test matching activities.

6. Develop a plan for content workshop for teachers (perhaps with teacher committee).

    a. Determine scope and objectives of workshop; distinguish between workshop activities and outside assignments.

*Principals are reminded that in addition to the notes provided at the end of this session the Content Leader's Guide will answer many specific questions about methods and materials.

b. Decide who will lead each part of workshop--notify individuals.

c. Arrange for necessary materials (agendas, data, transparencies, handouts).

d. Determine room and equipment to be used (a lot of table space is needed, overhead projector, coffee?).

7. Devise a strategy for dealing with identified training needs--idea of program and teacher centering links to district, regional education agency, and/or local teacher training institutions.

8. Announce date, place, time, and purpose of workshop.

a. Relate workshop activities to overall district and school goals.

b. Inform participants of materials they need to bring.

Training

1. Complete a last minute check on leaders, materials, facilities, notice to teachers.

2. Conduct teacher workshop as outlined in planning sessions with district staff.

3. Evaluate teacher workshop (see evaluation form that follows this list).

Participating

1. Identify and implement strategies to address major prior learning deficiencies.

2. Meet with small groups or individual teachers to monitor progress on School Year Planning Guide, and possibly review Unit Topic Plans and status of class mastery--weekly or every other week as lesson plans are checked.

3. Tell district about curriculum weaknesses determined in prior learning analysis. (This may serve as input for curriculum revision processes.)

4. Synthesize teacher inservice and professional growth needs based on data collected from plans and consultations with teachers.

5. Arrange inservice by district or regional agency for groups of teachers with same interest or need.

6. Attend district meeting to learn additional strategies and techniques for helping teachers achieve coverage goals.

7. Collect information needed to review success of instructional planning effort.

   a. Collect teachers' completed Content Summary Sheets prior to administering testing program.
   b. Analyze process and achievement data for each instructional group.

      - intended and actual instructional overlap
      - percentile ranks